NACOmatic

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INSTRUMENT APPROACH PROCEDURE CHARTS

IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME	ALTERNATE MINIMUMS
ABERDEEN, SD	
ABERDEEN RGNL	**RNAV (GPS) Rwy 13**
	RNAV (GPS) Rwy 31
	RNAV (GPS) Rwy 35
	VOR Rwy 31
	VOR/DME Rwy 13
NA when local weather not available.	
ALBERT LEA, MN	
ALBERT LEA MUNI	**RNAV (GPS) Rwy 16**
NA when local weather not available.	
ALEXANDRIA, MN	
CHANDLER FIELD	**RNAV (GPS) Rwy 22**
	RNAV (GPS) Rwy 31
NA when local weather not available.	
AUSTIN, MN	
AUSTIN MUNI	**RNAV (GPS) Rwy 17**
	RNAV (GPS) Rwy 35
	VOR/DME-A
NA when local weather not available.	
BAUDETTE, MN	
BAUDETTE INTL	**RNAV (GPS) Rwy 12**[1]
	RNAV (GPS) Rwy 30[1]
	VOR/DME Rwy 12
	VOR Rwy 30
Category C, 800-2¼; Category D, 800-2½.	
[1]NA when local weather not available.	
BEMIDJI, MN	
BEMIDJI RGNL	**RNAV (GPS) Rwy 13**
	RNAV (GPS) Rwy 25
	RNAV (GPS) Rwy 31
NA when local weather not available.	
BENSON, MN	
BENSON MUNI	**RNAV (GPS) Rwy 14**
	RNAV (GPS) Rwy 32
NA when local weather not available.	

NAME	ALTERNATE MINIMUMS
BISMARCK, ND	
BISMARCK MUNI	**ILS or LOC Rwy 13**[1]
	ILS or LOC Rwy 31[2]
	RADAR-1
NA when control tower closed.	
[1]ILS, Categories A, B, C, D, E, 700-2. LOC, NA.	
[2]ILS, Category D, 700-2. LOC, NA.	
BRAINERD, MN	
BRAINERD LAKES RGNL	**ILS or LOC Rwy 23**
	RNAV (GPS) Rwy 5
	RNAV (GPS) Rwy 12
	RNAV (GPS) Rwy 23
	RNAV (GPS) Rwy 30
	RNAV (GPS) Rwy 34
NA when local weather not available.	
BROOKINGS, SD	
BROOKINGS RGNL	**RNAV (GPS) Rwy 12**
	RNAV (GPS) Rwy 30
NA when local weather not available.	
CANBY, MN	
MYERS FIELD	**RNAV (GPS) Rwy 12**
	RNAV (GPS) Rwy 30
NA when local weather not available.	
CLOQUET, MN	
CLOQUET CARLTON COUNTY	**RNAV (GPS) Rwy 35**
NA when local weather not available.	
COOK, MN	
COOK MUNI	**RNAV (GPS) Rwy 31**
NA when local weather not available.	
CROOKSTON, MN	
CROOKSTON MUNI-KIRKWOOD FIELD	**RNAV (GPS) Rwy 13**[1]
	RNAV (GPS) Rwy 31[1]
	VOR Rwy 31[2]
[1]NA when local weather not available.	
[2]Category A, B, 900-2; Category C, 900-2¼.	

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NAME ALTERNATE MINIMUMS

DETROIT LAKES, MN

DETROIT LAKES-WETHING FIELD ..... **RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
NA when local weather not available.
Category D, 800-2¼.

DEVILS LAKE, ND

DEVILS LAKE RGNL ..... **RNAV (GPS) Rwy 3**
RNAV (GPS) Rwy 13
RNAV (GPS) Rwy 21
RNAV (GPS) Rwy 31
VOR Rwy 3[1]
VOR Rwy 21[2]
NA when local weather not available.
[1]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[2]Category C, 800-2¼, Category D, 800-2½.

DICKINSON, ND

DICKINSON-THEODORE ROOSEVELT RGNL ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
VOR-A
NA when local weather not available.

DODGE CENTER, MN

DODGE CENTER ..... **RNAV (GPS) Rwy 16**
RNAV (GPS) Rwy 34
VOR-A
NA when local weather not available.

DULUTH, MN

DULUTH INTL ..... **COPTER ILS Rwy 9[1]**
ILS or LOC Rwy 9[2]
ILS or LOC Rwy 27[3]
VOR or TACAN Rwy 3[4]
[1]LOC, NA.
[2]ILS, Category E, 900-2½; LOC, Category E, 800-2½.
[3]ILS, Category E, 700-2¼; LOC, Category E, 800-2¼.
[4]Category E, 800-2¼.

EVELETH, MN

EVELETH-VIRGINIA MUNI ..... **VOR/DME or GPS-A**
Category C, 800-2¼; Category D,800-2½.

FAIRBAULT, MN

FAIRBAULT MUNI ..... **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
VOR-A
NA when local weather not available.

NAME ALTERNATE MINIMUMS

FAIRMONT, MN

FAIRMONT MUNI ..... **RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
VOR Rwy 13
VOR Rwy 31
NA when local weather not available.

FARGO, ND

HECTOR INTL ..... **ILS or LOC Rwy 18[1]**
ILS or LOC Rwy 36[1]
RNAV (GPS) Rwy 18[2]
RNAV (GPS) Rwy 36[2]
VOR/DME or TACAN Rwy 18[2]
VOR or TACAN Rwy 36[3]
[1]ILS, Category E, 700-2¼. LOC, Category E, 800-2¼.
[2]Category E, 800-2¼.
[3]Category D, 800-2¼, Category E, 800-2½.

FERGUS FALLS, MN

FERGUS FALLS MUNI-EINAR MICKELSON FIELD ..... **ILS or LOC Rwy 31[1]**
NDB Rwy 31[2]
RNAV (GPS) Rwy 31[2]
RNAV (GPS) Rwy 35
NA when local weather not available.
[1]ILS, Category D, 700-2¼. LOC, Category D, 800-2¼.
[2]Category D, 800-2¼.

GLENCOE, MN

GLENCOE MUNI ..... **RNAV (GPS) Rwy 31**
NA when local weather not available.

GRAND FORKS, ND

GRAND FORKS INTL ... **ILS or LOC Rwy 35L[12]**
LOC BC Rwy 17R[13]
RNAV (GPS) Rwy 9L[3]
RNAV (GPS) Rwy 17R[3]
RNAV (GPS) Rwy 27R[3]
RNAV (GPS) Rwy 35L[3]
VOR Rwy 17R[3]
VOR Rwy 35L[3]
[1]NA when control tower closed.
[2]ILS, Category E, 700-2½. LOC, Category E, 800-2½.
[3]NA when local weather not available.

GRAND MARAIS, MN

GRAND MARAIS/COOK COUNTY ..... **RNAV (GPS) Rwy 27**
NA when local weather not available.

GRAND RAPIDS, MN

GRAND RAPIDS/ITASCA COUNTY-GORDON NEWSTROM FIELD ..... **RNAV (GPS) Rwy 16**
RNAV (GPS) Rwy 34
VOR Rwy 34
NA when local weather not available.

NAME ALTERNATE MINIMUMS

GRANITE FALLS, MN

GRANITE FALLS MUNI/LENZEN-ROE MEMORIAL FIELD ..... **RNAV (GPS) Rwy 33**
NA when local weather not available.

HETTINGER, ND

HETTINGER MUNI ..... **RNAV (GPS) Rwy 30**
NA when local weather not available.
Category D, 800-2¼.

HIBBING, MN

RANGE RGNL ..... **ILS OR LOC/DME Rwy 13[1]**
VOR Rwy 13[2]
[1]ILS,Categories A, B, C, D, 800-2.
[2]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾; ILS, 700-2.

HURON, SD

HURON RGNL ..... **ILS or LOC Rwy 12[12]**
LOC/DME BC Rwy 30[23]
RNAV (GPS) Rwy 12[23]
RNAV (GPS) Rwy 30[23]
VOR Rwy 12[23]
[1]ILS, Category D, 700-2¼. LOC, Category D, 800-2¼.
[2]NA when local weather not available.
[3]Category D, 800-2¼.

INTERNATIONAL FALLS, MN

FALLS INTL ..... **COPTER ILS or LOC Rwy 31[1]**
ILS or LOC/DME Rwy 13,700-2[2]
ILS or LOC Rwy 31[2]
RNAV (GPS) Rwy 13[2]
RNAV (GPS) Rwy 31[2]
VOR Rwy 13[23]
VOR/DME Rwy 31[2]
[1]LOC, NA; ILS, NA when local weather not available.
[2]NA when local weather not available.
[3]Category D, 800-2¼.

JACKSON, MN

JACKSON MUNI ..... **RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
NDB Rwy 13
NA when local weather not available.

JAMESTOWN, ND

JAMESTOWN RGNL ..... **RNAV (GPS) Rwy 4**
RNAV (GPS) Rwy 13
RNAV (GPS) Rwy 22
RNAV (GPS) Rwy 31
VOR Rwy 31
NA when local weather not available.

NAME ALTERNATE MINIMUMS

LANGDON, ND

ROBERTSON FIELD ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
NA when local weather not available.

LITCHFIELD, MN

LITCHFIELD MUNI ..... **RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
VOR-A
NA when local weather not available.
Category D, 800-2¼.

MANKATO, MN

MANKATO RGNL ..... **RNAV (GPS) Rwy 4**
RNAV (GPS) Rwy 15
RNAV (GPS) Rwy 22
RNAV (GPS) Rwy 33
VOR Rwy 15
VOR Rwy 33
NA when local weather not available.

MAPLE LAKE, MN

MAPLE LAKE MUNI ..... **VOR-A**
NA when local weather not available.

MARSHALL, MN

SOUTHWEST MINNESOTA RGNL MARSHALL/ RYAN FIELD ..... **RNAV (GPS) Rwy 12**
VOR Rwy 12
NA when local weather not available.

MINNEAPOLIS, MN

AIRLAKE ..... **RNAV (GPS) Rwy 12**
VOR Rwy 12[1]
NA when local weather not available.
[1]Category D, 800-2¼.

ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) ..... **ILS or LOC/DME Rwy 27**
RNAV (GPS) Rwy 9
RNAV (GPS) Rwy 18
RNAV (GPS) Rwy 27
VOR Rwy 9
VOR/DME Rwy 27
NA when local weather not available.

CRYSTAL ..... **RNAV (GPS) Rwy 14L**
NA when local weather not available.

FLYING CLOUD ..... **COPTER ILS or LOC Rwy 10R[1]**
ILS or LOC Rwy 10R[1]
RNAV (GPS) Rwy 10L
RNAV (GPS) Rwy 10R
RNAV (GPS) Rwy 28R
VOR Rwy 10R
VOR/DME Rwy 36
NA when local weather not available.
[1]NA when control tower closed.

NAME — ALTERNATE MINIMUMS

MINNEAPOLIS, MN (CON'T)

MINNEAPOLIS-ST. PAUL INTL/ WOLD CHAMBERLAIN . **ILS or LOC Rwy 12L[2]**
ILS or LOC Rwy 12R[1]
ILS or LOC Rwy 30L[1]
ILS or LOC Rwy 30R[2]
ILS or LOC Rwy 35[3]
LOC Rwy 4[4]
LOC Rwy 22[4]
RNAV (GPS) Rwy 4[4]
RNAV (GPS) Rwy 12L[5]
RNAV (GPS) Rwy 12R[4]
RNAV (GPS) Rwy 22[4]
RNAV (GPS) Rwy 30L[4]
RNAV (GPS) Rwy 30R[4]
RNAV (GPS) Z Rwy 35[6]

[1]ILS, Category D, 700-2; Category E, 900-3. LOC, Category E, 900-3.
[2]ILS, Categories A, B, C, 700-2; Category D, 700-2¼; Category E, 900-3. LOC, Category D, 800-2¼; Category E, 900-3.
[3]ILS, Categories A, B, 800-2; Category C, 800-2¼; Category D, 800-2½; Category E, 900-3. LOC, Category C, 800-2¼; Category D, 800-2½; Category E, 900-3.
[4]Category E, 900-3.
[5]Category D, 800-2¼; Cateogry E, 900-3.
[6]Category D, 800-2¼.

MINOT, ND

MINOT INTL ..... **ILS or LOC Rwy 31[12]**
LOC/DME BC Rwy 13[1]
RNAV (GPS) Rwy 8
RNAV (GPS) Rwy 13
RNAV (GPS) Rwy 26
RNAV (GPS) Rwy 31
VOR Rwy 8[3]
VOR Rwy 26[4]

NA when local weather not available.
[1]NA when tower closed.
[2]Category E, 1100-3.
[3]Categories A, B, 1100-2; Categories C, D, 1100-3.
[4]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

MITCHELL, SD

MITCHELL MUNI ..... **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
VOR Rwy 12
VOR Rwy 30[1]

NA when local weather not available.
[1]Categories A, B, 1000-2; Categories C, D, 1000-3.

NAME — ALTERNATE MINIMUMS

MOBRIDGE, SD

MOBRIDGE MUNI ..... **RNAV (GPS) Rwy 12[1]**
RNAV (GPS) Rwy 30[2]

NA when local weather not available
[1]Category D, 900-2¾.
[2]Category C, 800-2¼; Category D, 900-2¾.

MORRIS, MN

MORRIS MUNI-CHARLIE SCHMIDT FLD ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32

NA when local weather not available.

PINE RIDGE, SD

PINE RIDGE ..... **RNAV (GPS) Rwy 30**

NA when local weather not available.
Categories A, B, 900-2.

PIPESTONE, MN

PIPESTONE MUNI ..... **NDB Rwy 36**
RNAV (GPS) Rwy 18
RNAV (GPS) Rwy 36

NA when local weather not available.

PRESTON, MN

FILLMORE COUNTY ..... **RNAV (GPS) Rwy 29**

NA when local weather not available.

RAPID CITY, SD

RAPID CITY RGNL ..... **ILS or LOC Rwy 32[1]**
RNAV (GPS) Rwy 14[2]
RNAV (GPS) Rwy 32[2]
VOR or TACAN Rwy 14[2]
VOR or TACAN Rwy 32[2]

NA when local weather not available.
[1]ILS, Category D, 700-2; Category E, 800-2¾. LOC, Category E, 800-2¾.
[2]Category E, 800-2¼.

RED WING, MN

RED WING RGNL ..... **RNAV (GPS) Rwy 27**

NA when local weather not available.
Categories A, B, 1100-2; Category C, 1100-3.

REDWOOD FALLS, MN

REDWOOD FALLS MUNI ..... **RNAV (GPS) Rwy 30**
VOR-A

Category D, 800-2¼.
NA when local weather not available.

ROCHESTER, MN

ROCHESTER INTL ..... **ILS or LOC Rwy 13**
ILS or LOC Rwy 31
COPTER ILS or LOC Rwy 31

NA when control tower closed.

NAME ALTERNATE MINIMUMS

ROSEAU, MN
ROSEAU MUNI/
RUDY BILLBERG FIELD . **RNAV (GPS) Rwy 16**
RNAV (GPS) Rwy 34
NA when local weather not available.

ST. CLOUD, MN
ST. CLOUD RGNL . **ILS or LOC/DME Rwy 13[123]**
RNAV (GPS) Rwy 5[1]
RNAV (GPS) Rwy 13[1]
RNAV (GPS) Rwy 23[1]
RNAV (GPS) Rwy 31[1]
VOR/DME Rwy 13[12]
VOR Rwy 31[12]
[1]NA when local weather not available.
[2]NA when control tower closed.
[3]ILS, Categories A, B, C, D, 700-2.

ST. PAUL, MN
ST. PAUL DOWNTOWN HOLMAN
FIELD ..... **ILS or LOC Rwy 14[12]**
ILS or LOC Rwy 32[13]
RNAV (GPS) Rwy 14[3]
RNAV (GPS) Rwy 32[4]
[1]NA when local weather not available.
[2]ILS, LOC, Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[3]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[4]Categories A, B, C, 900-2½; Category D, 900-2¾.

SIOUX FALLS, SD
JOE FOSS FIELD ..... **ILS or LOC Rwy 3[12]**
ILS or LOC Rwy 21[1]
RADAR-1[3]
VOR or TACAN Rwy 15[4]
VOR/DME or TACAN Rwy 33[3]
[1]NA when control tower closed.
[2]LOC, NA.
[3]Category E, 800-2¾.
[4]Category E, 900-3.

SOUTH ST. PAUL, MN
SOUTH ST. PAUL MUNI-RICHARD E
FLEMING FIELD ..... **RNAV (GPS) Rwy 34**
Category D, 800-2¼.
NA when local weather not available.

NAME ALTERNATE MINIMUMS

THIEF RIVER FALLS, MN
THIEF RIVER
FALLS RGNL ..... **RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
VOR Rwy 13
NA when local weather not available.

VERMILLION, SD
HAROLD DAVIDSON
FIELD ..... **RNAV (GPS) Rwy 30**
NA when local weather not available.

WARROAD, MN
WARROAD INTL
MEMORIAL ..... **RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
NA when local weather not available.

WASECA, MN
WASECA MUNI ..... **RNAV (GPS) Rwy 15**
NA when local weather not available.

WATERTOWN, SD
WATERTOWN RGNL ..... **LOC/DME BC Rwy 17**
NDB Rwy 35
RNAV (GPS) Rwy 12
RNAV (GPS) Rwy 17
RNAV (GPS) Rwy 30
RNAV (GPS) Rwy 35
VOR or TACAN Rwy 17
NA when local weather not available.

WILLISTON, ND
SLOULIN FIELD INTL ..... **RNAV (GPS) Rwy 11**
RNAV (GPS) Rwy 29
VOR Rwy 11
VOR/DME Rwy 29
NA when local weather not available.

WILLMAR, MN
WILLMAR MUNI-JOHN
L RICE FIELD ..... **RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
VOR Rwy 13
VOR Rwy 31[1]
NA when local weather not available.
[1]Category D, 800-2¼.

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NAME ALTERNATE MINIMUMS

WINDOM, MN

WINDOM MUNI ..... **NDB Rwy 17**
Category C, 800-2¼.

WINNER, SD

WINNER RGNL ..... **RNAV (GPS) Rwy 13**
RNAV (GPS) Rwy 31
VOR-A
NA when local weather not available.

WORTHINGTON, MN

WORTHINGTON MUNI ..... **VOR or GPS Rwy 11**
Category D, 800-2¼.

YANKTON, SD

CHAN GURNEY MUNI ... **RNAV (GPS) Rwy 13**[1]
VOR Rwy 13[1]
VOR Rwy 31[2]
[1]NA when local weather not available.
[2]Category D, 800-2¼.

21 OCT 2010 to 18 NOV 2010

BISMARCK, ND

Amdt. 3B, AUG 26, 2010 (FAA) ELEV **1661**

BISMARCK MUNI

RADAR - 126.3 298.9 ▽ ⚠

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	13		AB	**2100**-1	445	(500-1)	C	**2100**-1¼	445	(500-1¼)
			D	**2100**-1½	445	(500-1½)				
	31		AB	**2100**/24	455	(500-½)	C	**2100**/40	455	(500-¾)
			D	**2100**/50	455	(500-1)				
	21		AB	**2120**-1	459	(500-1)	C	**2120**-1¼	459	(500-1¼)
			D	**2120**-1½	459	(500-1½)				
	3		AB	**2120**-1	459	(500-1)	C	**2120**-1¼	459	(500-1¼)
			D	**2120**-1½	459	(500-1½)				
CIRCLING			A	**2180**-1	519	(600-1)	B	**2220**-1	539	(600-1)
			C	**2220**-1½	559	(600-1½)	D	**2280**-2	619	(700-2)

Inoperative table does not apply to MALS Rwy 13.

DULUTH, MN

Amdt. 20, OCT 7, 1999 (FAA) ELEV **1428**

DULUTH INTL

RADAR - 125.45 255.9

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	3		ABC	**1820**-1	400	(400-1)	D	**1820**-1¼	400	(400-1¼)
			E	**1820**-1½	400	(400-1½)				
	27		AB	**1860**/24	439	(500-½)	C	**1860**/40	439	(500-¾)
			DE	**1860**/50	439	(500-1)				
	21		AB	**1860**-1	440	(500-1)	C	**1860**-1¼	440	(500-1¼)
			DE	**1860**-1½	440	(500-1½)				
	9		AB	**1880**/24	452	(500-½)	C	**1880**/40	452	(500-¾)
			DE	**1880**/50	452	(500-1)				
CIRCLING			AB	**1920**-1	492	(500-1)	C	**1920**-1½	492	(500-1½)
			DE	**1980**-2	552	(600-2)				

Category E circling NA southeast of Rwys 3 and 27.

21 OCT 2010 to 18 NOV 2010

ELLSWORTH AFB (KRCA) (Rapid City), SD (Amdt 1, 10294 USAF) ELEV 3276

RADAR - (E) 119.5 259.1[1]

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	13[2]		AB	**3820**/40	544	(600-¾)
			C	**3820**/50	544	(600-1)
			D	**3820**/60	544	(600-1¼)
			E	**3820**-1½	544	(600-1½)
	31[2]		AB	**3820**/40	628	(600-¾)
			C	**3820**/60	628	(600-1¼)
			D	**3820**-1½	628	(600-1½)
			E	**3820**-1¾	628	(600-1¾)
CIR	All Rwy[3]		A	**3860**-1¼	584	(600-1¼)
			B	**3880**-1¼	604	(700-1¼)
			C	**3880**-1¾	604	(700-1¾)
			D	**3880**-2	604	(700-2)
			E	**4040**-2¾	764	(800-2¾)

[1]Ltd ASR apch avbl 1300-0500Z++ Mon-Fri. [2]When ALS inop, increase CAT AB RVR to 60 and vis to 1¼, increase CAT CDE vis ½ mile. [3]CAT E circling restricted to 28th BW aircraft only; 28th BW aircraft will remain within class D airspace.

21 OCT 2010 to 18 NOV 2010

MANDAN, ND Amdt. 4, NOV 09, 1995 (FAA) ELEV 1942

MANDAN MUNI

RADAR - 126.3 298.9 ⚠ NA

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HAT/ HAA	CEIL-VIS
ASR	31		AB	**2360**-1	418	(500-1)	CD	**2360**-1¼	418	(500-1¼)
	13		AB	**2460**-1	520	(600-1)	C	**2460**-1½	520	(600-1½)
			D	**2460**-1¾	520	(600-1¾)				
CIRCLING			A	**2460**-1	518	(600-1)	B	**2500**-1	558	(600-1)
			C	**2500**-1½	558	(600-1½)	D	**2500**-2	558	(600-2)

Use Bismarck altimeter setting.
When Bismarck control tower closed, ASR NA.

21 OCT 2010 to 18 NOV 2010

ROCHESTER, MN

Amdt. 8, JAN 15, 2009 (FAA) ELEV **1317**

ROCHESTER INTL

RADAR - 119.8 251.125 ▽

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	2		ABC	**1680**-1	363	(400-1)	D	**1680**-1¼	363	(400-1¼)
	13		ABC	**1640**/24	360	(400-½)	D	**1640**/50	360	(400-1)
	20		ABC	**1660**-1	356	(400-1)	D	**1660**-1¼	356	(400-1¼)
	31		ABC	**1660**/24	356	(400-½)	D	**1660**/50	356	(400-1)
CIRCLING			A	**1720**-1	403	(500-1)	B	**1780**-1	463	(500-1)
			C	**1780**-1½	463	(500-1½)	D	**1880**-2	563	(600-2)

When control tower closed, procedure NA. For inoperative MALSR, increase S-13 and S-31 Cat D visibility to RVR 6000. Visibility reduction by helicopters NA Rwy 2-20.

SIOUX FALLS, SD

Amdt. 10A, OCT 3,2003 (FAA) ELEV **1429**

JOE FOSS FIELD

RADAR - 125.8 353.6 ▽ ⚠

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	3		AB	**1940**/24	517	(600-½)	C	**1940**/50	517	(600-1)
			DE	**1940**/60	517	(600-1¼)				
	33		AB	**1920**-1	497	(500-1)	C	**1920**-1¼	497	(500-1¼)
			D	**1920**-1½	497	(500-1½)	E	**1920**-1¾	497	(500-1¾)
	21		AB	**1960**/24	531	(600-½)	C	**1960**/50	531	(600-1)
			D	**1960**/60	531	(600-1¼)	E	**1960**-1½	531	(600-1½)
	15		AB	**1960**-1	534	(600-1)	C	**1960**-1½	534	(600-1½)
			D	**1960**-1¾	534	(600-1¾)	E	**1960**-2	534	(600-2)
CIRCLING			AB	**1960**-1	531	(600-1)	C	**1960**-1½	531	(600-1½)
			D	**2040**-2	611	(700-2)	E	**2300**-3	871	(900-3)

When control tower closed, procedure not authorized.
Category E S-3 visibility increased 1¾ mile for inoperative MALSR.
Category E S-21 visibility increased to 2 miles for inoperative MALSR.

INSTRUMENT APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

21 OCT 2010 to 18 NOV 2010

NAME	TAKE-OFF MINIMUMS

ABERDEEN, SD

ABERDEEN RGNL (ABR)
ORIG 09239 (FAA)
NOTE: **Rwy 17,** trees 1138' from DER, 432' right of centerline, 41' AGL/1336' MSL. **Rwy 31,** multiple trees beginning 1391' from DER, 326' left of centerline, up to 65' AGL/1360' MSL.

AITKIN, MN

AITKIN MUNI-STEVE KURTZ FIELD (AIT)
AMDT 2 96172 (FAA)
TAKE-OFF MINIMUMS: **Rwys 8, 26,** 300-1. **Rwy 16,** 300-1 or std. with a min climb of 400' per NM to 1500.
DEPARTURE PROCEDURE: **Rwys 16, 26,** climb runway heading to 1700 before turning.

ALBERT LEA, MN

ALBERT LEA MUNI (AEL)
ORIG 85241 (FAA)
DEPARTURE PROCEDURE: **Rwys 16, 22,** climb runway heading to 1800 before turning on course.

ALEXANDRIA, MN

CHANDLER FIELD (AXN)
DEPARTURE PROCEDURE: **Rwys 4, 13, 22,** when weather is below 200-1, climb runway heading to 1800 before turning.

NAME	TAKE-OFF MINIMUMS

APPLETON, MN

APPLETON MUNI (AQP)
ORIG-A 10126 (FAA)
DEPARTURE PROCEDURE: **Rwy 4,** climb heading 039° to 2000 before turning right. **Rwy 13,** climb heading 130° to 2500 before turning right. **Rwy 22,** climb heading 219° to 2400 before turning left. **Rwy 31,** climb heading 300° to 2000 before turning left.
NOTE: **Rwy 13,** trees beginning 91' from DER, 464' left of centerline, up to 100' AGL/1134' MSL. Trees beginning 576' from DER, 388' right of centerline, up to 100' AGL/1120' MSL. Tower 2.3 NM from DER, 2.4 right of centerline, 1283' AGL/2318' MSL.

AUSTIN, MN

AUSTIN MUNI (AUM)
ORIG 08045 (FAA)
NOTE: **Rwy 17,** Multiple trees beginning 809' from departure end of runway, 663' right of centerline, up to 61' AGL/1285' MSL. **Rwy 35,** Tree 1380' from departure end of runway, 484' right of centerline, 100' AGL/1314' MSL.

BAUDETTE, MN
BAUDETTE INTL (BDE)
AMDT 1 10154 (FAA)
DEPARTURE PROCEDURE: **Rwy 12,** climb heading 117° to 1700 before turning northbound.
NOTE: **Rwy 12,** trees, pipes, and markers beginning 61' from DER, 354' right of centerline, up to 100' AGL/1184' MSL. Trees beginning 593' from DER, 138' left of centerline, up to 21' AGL/1100' MSL. Rod on OL tank 4132' from DER, 1233' right of centerline, 120' AGL/1204' MSL. **Rwy 30,** trees beginning 15' from DER, 348' right of centerline, 12' AGL/1096' MSL. Trees beginning 2036' from DER, 532' left of centerline, 64' AGL/1143' MSL.

BELLE FOURCHE, SD
BELLE FOURCHE MUNI (EFC)
AMDT 2 09015 (FAA)
TAKE-OFF MINIMUMS: **Rwys 18,36,** NA. **Rwy 14,** std. w/ min. climb of 240' per NM to 9000 or 1400-3 for climb in visual conditions. **Rwy 32,** std. w/ min. climb of 413' per NM to 3900.
DEPARTURE PROCEDURE: **Rwy 14,** for climb in visual conditions: cross Belle Fourche Muni airport at or above 4400 MSL before proceeding on course. **Rwy 32,** climb heading 321° to 3900 before proceeding southbound.
NOTE: **Rwy 14,** trees 651' from departure end of runway, 547' left of centerline, up to 20' AGL/3299' MSL. **Rwy 32,** trees 857' from departure end of runway, 150' left of centerline, up to 20' AGL/3199' MSL. Trees 3880' from departure end of runway, 966' right of centerline, up to 20' AGL/3289' MSL.

BEMIDJI, MN
BEMIDJI RGNL (BJI)
AMDT 3 08213 (FAA)
NOTE: **Rwy 7,** vegetation beginning 859' from departure end of runway, 544' right of centerline, up to 62' AGL/1442' MSL. Vegetation beginning 1404' from departure end of runway, 683' left of centerline, up to 44' AGL/1424' MSL. **Rwy 13,** vehicle on road, 541' from departure end of runway, 525' right of centerline, 15' AGL/1398' MSL. **Rwy 25,** poles beginning 1337' from departure end of runway, 205' right of ceterline up to 61' AGL/1445' MSL. Trees beginning 1414' from departure end of runway, 254' left of centerline, up to 57' AGL/1441' MSL. Tree 1406' from departure end of runway, 233' right of centerline, 53' AGL/1437' MSL.

BENSON, MN
BENSON MUNI (BBB)
AMDT 1 09127 (FAA)
NOTE: **Rwy 14,** numerous trees beginning 838' from DER, 246' right of centerline, up to 33' AGL/1087' MSL. Numerous trees beginning 1232' from DER, 64' left of centerline, up to 69' AGL/1108' MSL. Sign 206' from DER, 198' left of centerline, 19' AGL/1044' MSL. Tower 4884' from DER, 274' right of centerline, 126' AGL/1161' MSL. **Rwy 32,** Tree 2380' from DER, 646' left of centerline, 68' AGL/1107' MSL. Multiple fences beginning 13' from DER, 361' left of centerline, up to 8' AGL/1043' MSL.

BIGFORK, MN
BIGFORK MUNI (FOZ)
ORIG -A 10126 (FAA)
TAKE-OFF MINIMUMS: **Rwy 15,** 400-1 or std. with a min. climb of 332' per NM to 1900.

BISMARCK, ND
BISMARCK MUNI (BIS)
AMDT 7 01137 (FAA)
DEPARTURE PROCEDURE: **Rwys 3, 31,** climb runway heading to 2500 before proceeding on course. **Rwys 13, 21**, climb runway heading to 3800 before proceeding south.

BOTTINEAU, ND
BOTTINEAU MUNI (D09)
AMDT 1 10154 (FAA)
TAKE-OFF MINIMUMS: **Rwys 3, 21,** NA.
DEPARTURE PROCEDURE: **Rwy 13,** climb heading 127° to 2200 before turning left. **Rwy 31,** climb heading 307° to 2600 before turning right.
NOTE: **Rwy 31,** street light 116' from DER, 474' left of centerline, 16' AGL/1700' MSL.

BRAINERD, MN
BRAINERD LAKES RGNL (BRD)
AMDT 5A 10126 (FAA)
NOTE: **Rwy 12,** multiple trees beginning 165' from DER, 417' left of centerline, up to 78' AGL/1279' MSL. Multiple trees and vehicle on road beginning 304' from DER, 206' right of centerline, up to 66' AGL/1277' MSL. **Rwy 16,** multiple trees beginning 1830' from DER, 749' left of centerline, up to 74' AGL/1314' MSL. **Rwy 23,** multiple trees beginning 1495' from DER, 179' left of centerline, up to 48' AGL/1285' MSL. Tree 2437' from DER, 716' right of centerline, 50' AGL/1279' MSL. **Rwy 30,** multiple trees beginning 243' from DER, 131'left of centerline, up to 61' AGL/1287' MSL. Multiple trees 48' from DER, 328' right of centerline, up to 59' AGL/1329' MSL. **Rwy 34,** trees beginning 2341' from DER, left and right of centerline, up to 93' AGL/1293' MSL.

BRITTON, SD
BRITTON MUNI (BTN)
AMDT 2 96060 (FAA)
TAKE-OFF MINIMUMS: **Rwy 13,** 300-1 or std. with a min. climb of 450' per NM to 1600. **Rwy 19,** 300-1.
DEPARTURE PROCEDURE: **Rwy 19,** climb runway heading to 2000 before turning.

BROOKINGS, SD
BROOKINGS RGNL (BKX)
ORIG 09015 (FAA)
NOTE: **Rwy 12,** pole and trees beginning 1041' from departure end of runway, 207' left of centerline, up to 65' AGL/1705' MSL. Building 1277' from departure end of runway, 825' right of centerline, 38' AGL/1618' MSL. **Rwy 17,** vehicle on road 799' from departure end of runway, on centerline, up to 15' AGL/1687' MSL. Trees beginning 906' from departure end of runway, 464' left of centerline, up to 100' AGL/1749' MSL. **Rwy 30,** railroad beginning 547' from departure end of runway, 502' right of centerline, 23' AGL/1626' MSL. Tree 132' from departure end of runway, 433' left of centerline, 20' AGL/1615' MSL. **Rwy 35,** trees 2892' from departure end of runway, 944' right of centerline, up to 100' AGL/1709' MSL.

CANBY, MN
MYERS FIELD (CNB)
AMDT 1 10210 (FAA)
NOTE: **Rwy 12,** numerous poles beginning 40' from DER, 421' left and right of centerline, up to 36' AGL/1216' MSL. Truck on roads beginning 134' from DER, 37' left and right of centerline, up to 22' AGL/1202' MSL. Tree 3' from DER, 159' right of centerline, 7' AGL/1187' MSL. **Rwy 30,** numerous trees beginning 726' from DER, 176' left of centerline, up to 70' AGL/1278' MSL. Tree 1338' from DER, 716' right of centerline, 68' AGL/1268' MSL.

CASSELTON, ND
CASSELTON ROBERT MILLER RGNL (5N8)
ORIG 07354 (FAA)
TAKE-OFF MINIMUMS: **Rwy 31,** 400-2½ or std. w/ a min. climb of 212' per NM to 1400 or alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1700' prior to departure end of runway.
NOTE: **Rwy 13,** railroad 30' from departure end of runway, 505' right of centerline, 23' AGL/945' MSL. Vehicle on road 449' from departure end of runway, 300' left of centerline, 15' AGL/949' MSL. **Rwy 31,** trees 2251' from departure end of runway, 456' left of centerline, up to 100' AGL/1052' MSL.

CAVALIER, ND
CAVALIER MUNI (2C8)
ORIG 03191 (FAA)
TAKE-OFF MINIMUMS: **Rwy 16,** 300-1 or std. with a min. climb of 430' per NM to 1200.
NOTE: **Rwy 16,** grain elevator 3731' from departure end of runway, 284' left of centerline, 168' AGL/1060' MSL.

CHAMBERLAIN, SD
CHAMBERLAIN MUNI (9V9)
ORIG 10154 (FAA)
TAKE-OFF MINIMUMS: **Rwys 18, 36,** NA-Environmental.
NOTE: **Rwy 31,** fence 457' from DER, 376' left of centerline, 10' AGL/1705' MSL. Fence 1294' from DER, 424' right of centerline, 10' AGL/1722' MSL. Trees beginning 1763' from DER, 892' left of centerline, up to 100' AGL/1819' MSL. Trees beginning 189' from DER, 41' right of centerline, up to 100' AGL/1819' MSL.

CLOQUET, MN
CLOQUET CARLTON COUNTY (COQ)
AMDT 1 80248 (FAA)
TAKE-OFF MINIMUMS: **Rwy 7,** 300-1 or std. with a min. climb of 400' per NM to 1400.

CROOKSTON, MN
CROOKSTON MUNI-KIRKWOOD FIELD (CKN)
AMDT 2 07298 (FAA)
TAKE-OFF MINIMUMS: **Rwys 6, 17, 24, 35,** NA-turf runways.
NOTE: **Rwy 13,** tree 1998' from departure end of runway, 587' left of centerline, 94' AGL/970' MSL. Pole 1127' from departure end of runway, 662' left of centerline, 46' AGL/926' MSL.

CROSBY, ND
CROSBY MUNI (D50)
ORIG 10154 (FAA)
TAKE-OFF MINIMUMS: **Rwys 3, 21,** NA-Environmental.
NOTE: **Rwy 12,** hangars and poles beginning 133' from DER, 263' right of centerline, up to 35' AGL/1983' MSL. Vehicle on road 800' from DER, 200' right of centerline, 22' AGL/1967' MSL. **Rwy 30,** power line, 2100' from DER, on centerline, 60' AGL/2011' MSL.

DETROIT LAKES, MN
DETROIT LAKES-WETHING FIELD (DTL)
ORIG 05132 (FAA)
TAKE-OFF MINIMUMS: **Rwys 17, 35,** NA.
NOTE: **Rwy 31,** highway 243' from departure end of runway, 267' right of centerline, 15' AGL/1404' MSL. Railroad 534' from departure end of runway, 298' right of centerline, 23' AGL/1411' MSL.

DEVILS LAKE, ND
DEVILS LAKE RGNL (DVL)
AMDT 1A 09351 (FAA)
TAKE-OFF MINIMUMS: **Rwy 31,** 300-1 or std. with a min. climb of 350' per NM to 1600.
NOTE: **Rwy 3,** tree 1528' from DER, 319' left of centerline, 100' AGL/1490' MSL. Tree 1520' from DER, 136' right of centerline, 100' AGL/1489' MSL. **Rwy 13,** bush 266' from DER, 523' left of centerline, 17' AGL/1451' MSL. Road, light pole and antenna on building beginning 95' from DER, 414' right of centerline, up to 17' AGL/1484' MSL. **Rwy 21,** roads beginning 335' from DER, 2' right of centerline, 15' AGL/1447' MSL, multiple poles, trees and towers beginning 552' from DER 355' left of centerline, up to 123' AGL/1548' MSL. **Rwy 31,** road 470' from DER, 424' right of centerline, 15' AGL/1472' MSL. Multiple poles and trees beginning 1180' from DER, 354' left of centerline, up to 49' AGL/1545' MSL.

DICKINSON, ND
DICKINSON-THEODORE ROOSEVELT RGNL (DIK)
AMDT 1 05244 (FAA)
DEPARTURE PROCEDURE: **Rwy 25,** climb via heading 250° to 3100 before turning left.
NOTE: **Rwy 7,** road 887' from departure end of runway, on rwy centerline, 15' AGL/2631' MSL.

DODGE CENTER, MN
DODGE CENTER (TOB)
ORIG 09015 (FAA)
TAKE-OFF MINIMUMS: **Rwy 22,** NA-Environmental.
NOTE: **Rwy 16,** trees 3945' from departure end of runway, 1542' left of centerline, 100' AGL/1409' MSL.

DULUTH, MN

DULUTH INTL (DLH)
ORIG 06327 (FAA)
NOTE: **Rwy 3,** multiple trees beginning 21' from departure end of runway, 226' right of centerline, up to 68' AGL/1477' MSL. Multiple trees beginning 246' from departure end of runway, 26' left of centerline, up to 64' AGL/1473' MSL. **Rwy 9,** electrical equipment 207' from departure end of runway, 408' left of centerline, 6' AGL/1425' MSL. **Rwy 21,** tower 3762' from departure end of runway, 410' left of centerline, 92' AGL/1522' MSL. **Rwy 27,** tree 2426' from departure end of runway, 1127' right of centerline, 53' AGL/1522' MSL. Bush and multiple trees beginning 347' from departure end of runway, 484' left of centerline, up to 44' AGL/1533' MSL.

SKY HARBOR (DYT)
ORIG 83174 (FAA)
TAKE-OFF MINIMUMS: **Rwy 14,** 300-1. **Rwy 32,** 1500-2 or std. with a min. climb of 360' per NM to 2300.
DEPARTURE PROCEDURE: **Rwy 14,** northwest departures (260° CW 030°) climb to 2300 via heading 260° or 030° before proceeding on course.

EAGLE BUTTE, SD

CHEYENNE EAGLE BUTTE (84D)
ORIG 96228 (FAA)
TAKE-OFF MINIMUMS: **Rwys 13,31,** 300-1.

ELY, MN

ELY MUNI (ELO)
AMDT 2 97086 (FAA)
TAKE-OFF MINIMUMS: **Rwy 12,** 300-1 or std. with a min. climb of 200' per NM to 1600.
DEPARTURE PROCEDURE: **Rwy 30,** northbound departures climb runway heading to 2000 before turning.

EVELETH, MN

EVELETH-VIRGINIA MUNI (EVM)
AMDT 2 94118 (FAA)
TAKE-OFF MINIMUMS: **Rwy 32,** 800-2 or std. with a min. climb to 330' per NM to 2300.
DEPARTURE PROCEDURE: **Rwy 27**, northwest departures (270°-050°) climb runway heading to 2200 before turning.

FAIRMONT, MN

FAIRMONT MUNI (FRM)
AMDT 3 09127 (FAA)
NOTE: **Rwy 2,** trees beginning 2466' from DER, 1105' right of centerline, up to 100' AGL/1269' MSL. **Rwy 13,** tree 2340' from DER, 1039' left of centerline, 100' AGL/1269' MSL. **Rwy 20,** trees beginning 1640' from DER, 914' right of centerline, up to 100' AGL/1289' MSL. Trees beginning 913' from DER, 449' left of centerline, up to 100' AGL/1299' MSL. **Rwy 31,** trees beginning 954' from DER, 161' left of centerline, up to 100' AGL/1299' MSL. Trees and road beginning 791' from DER, 339' right of centerline, up to 57' AGL/1226' MSL.

FARGO, ND

HECTOR INTL (FAR)
AMDT 4 04330 (FAA)
TAKE-OFF MINIMUMS: **Rwys 13,31,** NA.
NOTE: **Rwy 9,** multiple light poles 1124' from departure end of runway, 305' left of centerline, 20' AGL/927' MSL.

FARIBAULT, MN

FARIBAULT MUNI (FBL)
ORIG 10266 (FAA)
NOTE: **Rwy 12,** numerous trees beginning 73' from DER, 51' right and left of centerline, up to 100' AGL/1169' MSL. **Rwy 30,** numerous trees beginning 24' from DER, 266' right and left of centerline, up to 100' AGL/1189' MSL.

FERGUS FALLS, MN

FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)
ORIG 09239 (FAA)
NOTE: **Rwy 13,** trees beginning 2612' from DER, 128' right of centerline, up to 100' AGL/1269' MSL. Trees beginning 2514' from DER, 42' left of centerline, up to 100' AGL/1259' MSL. **Rwy 17,** trees beginning 1100' from DER 663' right of centerline, up to 100' AGL/1269' MSL. Road 222' from DER, 469' right of centerline, 15' AGL/1173' MSL. **Rwy 35,** trees beginning 2156' from DER, 176' right of centerline, up to 100' AGL/1289' MSL.

FOSSTON, MN

FOSSTON MUNI (FSE)
AMDT 1A 10182 (FAA)
DEPARTURE PROCEDURE: **Rwy 16,** climb runway heading to 2000 before turning.

GETTYSBURG, SD

GETTYSBURG MUNI (0D8)
AMDT 1 07018 (FAA)
NOTE: **Rwy 4,** multiple trees beginning 1011' from departure end of runway, 420' left of centerline, up to 60' AGL/2119' MSL. **Rwy 13,** multiple trees beginning 1897' from departure end of runway, 975' left of centerline, 60' AGL/2119' MSL. **Rwy 22,** multiple trees beginning 679' from departure end of runway, 117' left of centerline, up to 60' AGL/2109' MSL.

GLENCOE, MN

GLENCOE MUNI (GYL)
ORIG 09071 (FAA)
NOTE: **Rwy 13,** trees beginning349' from DER, 257' right of centerline, up to 100' AGL/1099' MSL. Trees beginning 1211' from DER, 314' left of centerline, up to 100' AGL/1109' MSL. Terrain beginning 53' from DER, 166' left of centerline, up to 998' MSL. Terrain beginning 286' from DER, 435' right of centerline, up to 1001' MSL. **Rwy 31,** trees beginning 501' from DER, 530' right of centerline, up to 100' AGL/1099' MSL. Tree 2577' from DER, 129' left of centerline, 100' AGL/1109' MSL.

GLENWOOD, MN
GLENWOOD MUNI (GHW)
AMDT 2 98337 (FAA)
TAKE-OFF MINIMUMS: **Rwy 5,** 1200-2 or std. with a min. climb of 220' per NM to 2900.

GRAFTON, ND
HUTSON FIELD (GAF)
AMDT 1 10210 (FAA)
TAKE-OFF MINIMUMS: **Rwys 8, 26,** NA-Environmental.
NOTE: **Rwy 17,** vehicle on roads beginning 23' from DER, 300' left of centerline, up to 15' AGL/837' MSL. Tree 2612' from DER, 857' left of centerline, 100' AGL/929' MSL. **Rwy 35,** building 107' from DER, 344' left of centerline, 17' AGL/836' MSL. Electrical system 153' from DER, 398' left of centerline, 21' AGL/840' MSL. Vehicle on roads beginning 260' from DER, 74' left of centerline, up to 15' AGL/841' MSL. Obstruction light on airport beacon 471' from DER, 601' left of centerline, 54' AGL/873' MSL.

GRAND FORKS, ND
GRAND FORKS INTL (GFK)
AMDT 2 09071 (FAA)
NOTE: **Rwy 9L,** tree 127' from DER, 451' left of centerline, 12' AGL/853' MSL. **Rwy 27R,** bush 38' from DER, 474' right of centerline, 5' AGL/844' MSL. **Rwy 35L,** obstruction light on DME 645' from DER, 198' left of centerline, 21' AGL/860' MSL. **Rwy 35R,** tree 1259' from DER, 521' right of centerline, 41' AGL/880' MSL. Tree 1655' from DER, 271' left of centerline, 45' AGL/884' MSL.

GRAND MARAIS, MN
GRAND MARAIS/COOK COUNTY (CKC)
ORIG 09015 (FAA)
NOTE: **Rwy 9,** trees beginning 58' from departure end of runway, 168' right of centerline up to 54' AGL/1833' MSL. Bushes 112' from departure end of runway, 142' left of centerline, 11' AGL/1805' MSL. Tree 464' from departure end of runway, 75' left of centerline, 14' AGL/1813' MSL. **Rwy 27,** trees beginning 85' from departure end of runway, 187' left of centerline, up to 59' AGL/1858' MSL. Trees beginning 282' from departure end of runway, 115' right of centerline, up to 42' AGL/1861' MSL.

GRAND RAPIDS, MN
GRAND RAPIDS/ITASCA COUNTY-GORDON NEWSTROM FIELD (GPZ)
AMDT 4 09127 (FAA)
TAKE-OFF MINIMUMS: **Rwys 5,10,23,28,** NA-Environmental.
NOTE: **Rwy 16,** tree 1655' from DER, 899' left of centerline, 51' AGL/1410' MSL. Tree 3236' from DER, 1130' right of centerline, 82' AGL/1441' MSL. **Rwy 34,** tree 3416' from DER, 1253' right of centerline, 100' AGL/1399' MSL.

GRANITE FALLS, MN
GRANITE FALLS MUNI/LENZEN-ROE MEML FLD (GDB)
ORIG 10126 (FAA)
NOTE: **Rwy 15,** trees beginning 1780' from DER, 94' left of centerline, up to 100' AGL/1149' MSL. **Rwy 33,** trees beginning 1196' from DER, right and left of centerline, up to 100' AGL/1149' MSL. Powerline 1242' from DER, 762' left of centerline, 80' AGL/1129' MSL. Train 1390' from DER, 149' left of centerline, 23' AGL/1162' MSL. Vehicle on road 1389' from DER, 156' left of centerline, up to 15' AGL/1154' MSL.

GREGORY, SD
GREGORY MUNI, FLYNN FIELD (9D1)
ORIG-A 10182 (FAA)
TAKE-OFF MINIMUMS: **Rwy 31,** 400-2¼ or std. with a min. climb of 228' per NM to 2600.
NOTE: **Rwy 31,** tower 11377' from DER, 816' right of centerline, 210' AGL/2491' MSL.

GWINNER, ND
GWINNER-ROGER MELROE FIELD (GWR)
ORIG 09183 (FAA)
TAKE-OFF MINIMUMS: **Rwys 6, 24,** NA-Environment. **Rwy 34,** Std. w/ min. climb of 216' per NM to 2000, or 900-2½ for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwy 34,** for climb in visual conditions, cross Gwinner-Roger Melroe Field at or above 2000, before proceeding on course.
NOTE: **Rwy 16,** terrain beginning 15' from DER, 73' right of centerline, 1257' MSL. **Rwy 34,** road and vehicle 436' from DER, on centerline, 15' AGL/1286' MSL.

HARVEY, ND
HARVEY MUNI (5H4)
ORIG 10266 (FAA)
NOTE: **Rwy 11,** vehicle on road beginning 50' from DER, 318' left of centerline, up to 15' AGL/1654' MSL. Tree 300' from DER, 329' right of centerline, 20' AGL/1621' MSL. Tree 350' from DER, 444' right of centerline, 20' AGL/1619' MSL. **Rwy 29,** vehicle on road beginning 4' from DER, left and right of centerline, up to 15' AGL/1654' MSL. Rising terrain beginning 7' from DER, 31' left of centerline, up to 1608' MSL.

HAWLEY, MN
HAWLEY MUNI (04Y)
ORIG 07074 (FAA)
NOTE: **Rwy 34,** road 15' from departure end of runway, 421' left of centerline, 15' AGL/1224' MSL.

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HAZEN, ND
MERCER COUNTY RGNL (HZE)
ORIG 10210 (FAA)
TAKE-OFF MINIMUMS: **Rwy 32,** std. w/ min. climb of 215' per NM to 2700, or 900-3 for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwy 32,** for climb in visual conditions: cross Mercer County Rgnl airport at or above 2600 MSL before proceeding on course.
NOTE: **Rwy 14,** numerous fences beginning 196' from DER, 108' left of centerline, up to 12' AGL/1843' MSL. Terrain beginning 501' from DER, 271' left of centerline, up to 1837' MSL. **Rwy 32,** tree 1291' from DER, 592' right of centerline, 25' AGL/1833' MSL. Terrain 495' from DER, 360' left of centerline, 1803' MSL. Fence 5' from DER, 298' left of centerline, 8' AGL/1790' MSL. Tree 1444' from DER, 520' right of centerline, 25' AGL/1823' MSL.

HETTINGER, ND
HETTINGER MUNI (HEI)
AMDT 2 10154 (FAA)
TAKE-OFF MINIMUMS: **Rwy 12,** 300-1 or std. with a min. climb of 324' per NM to 3000. **Rwys 17, 35,** NA-Environmental.
NOTE: **Rwy 30,** road plus vehicles beginning 63' from DER, crossing left to right, 15' AGL/2744' MSL. Trees beginning 4306' from DER, 17' right of centerline, 100' AGL/2819' MSL.

HIBBING, MN
RANGE RGNL (HIB)
AMDT 6 04218 (FAA)
DEPARTURE PROCEDURE: **Rwy 22,** climb via heading 227° to 2200 before turning right. **Rwy 31,** climb via heading 310° to 2200 before turning left.
NOTE: **Rwy 4,** antenna on pole, 361' from departure end of runway, 409' right of centerline, 1377' MSL. **Rwy 13,** obstacle light on pole, 1184' from departure end of runway, 636' left of centerline. Numerous trees beginning 1291' from departure end of runway, 745' left of centerline up to 1419' MSL. Trees 1497' from departure end of runway, 563' right of centerline, 1388' MSL. **Rwy 22,** multiple trees beginning 368' from departure end of runway, 170' right of centerline, up to 1416' MSL. Multiple trees beginning 413' from departure end of runway, 117' left of centerline, up to 1400' MSL. **Rwy 31,** light standard, 865' from departure end of runway, 595' right of centerline, 1381' MSL.

HILLSBORO, ND
HILLSBORO MUNI (3H4)
ORIG 97198 (FAA)
DEPARTURE PROCEDURE: **Rwys 16, 34,** climb runway heading to 2000 prior to turning westbound.

HINCKLEY, MN
FIELD OF DREAMS (04W)
ORIG 08045 (FAA)
NOTE: **Rwy 6,** Tree 82' from departure end of runway, 480' right of centerline, 100' AGL/1114' MSL. Tree 143' from departure end of runway, 161' left of centerline, 100' AGL/1114' MSL. **Rwy 24,** Tree 48' from departure end of runway, 165' left of centerline, 100' AGL/1124' MSL.

HOT SPRINGS, SD
HOT SPRINGS MUNI (HSR)
ORIG 97142 (FAA)
TAKE-OFF MINIMUMS: **Rwy 1,** 300-1 or std. with a min. climb of 360' per NM to 5000. **Rwy 19,** 300-2 or std. with a min. climb of 250' per NM to 5000.
DEPARTURE PROCEDURE: **Rwys 1, 19,** climb runway heading to 5000 before proceeding westbound.

HURON, SD
HURON RGNL (HON)
AMDT 5 09239 (FAA)
NOTE: **Rwy 12,** trees and pole beginning 918' from DER, 525' left of centerline, up to 62' AGL/1341' MSL. Trees beginning 291' from DER, 234' right of centerline, up to 100' AGL/1389' MSL. **Rwy 17,** trees beginning 236' from DER, 307' left of centerline, up to 67' AGL/1346' MSL. Trees beginning 264' from DER, 262' right of centerline, 73' AGL/1352' MSL. **Rwy 30,** trees beginning 3428' from DER, 1378' left of centerline, up to 100' AGL/1394' MSL. **Rwy 35,** trees beginning 60' from DER, 104' left of centerline, up to 49' AGL/1328' MSL. Trees beginning 251' from DER, 97' right of centerline, 52' AGL/1331' MSL.

INTERNATIONAL FALLS, MN
FALLS INTL (INL)
AMDT 3 08101 (FAA)
NOTE: **Rwy 4,** Tree 392' from departure end of runway 311' left of centerline, 51' AGL/1231' MSL. **Rwy 13,** multiple trees beginning 1999' from departure end of runway, 773' left of centerline, up to 63' AGL/1233' MSL. Pole 1091, from departure end of runway, 703' right of centerline, 37' AGL/1207' MSL. Road 1005' from departure end of runway, 766' left of centerline, 15' AGL/1195' MSL. **Rwy 22,** Multiple trees beginning 433' from departure end of runway 273' left of centerline, up to 33' AGL/1213' MSL. Trees 1144' from departure end of runway 136' right of centerline, 28' AGL/1208' MSL. **Rwy 31,** Trees 968' from departue end of runway, 752' left of centerline, 56' AGL/1236' MSL.

JACKSON, MN
JACKSON MUNI (MJQ)
ORIG 08045 (FAA)
TAKE-OFF MINIMUMS: **Rwys 4, 22,** NA-TURF.
DEPARTURE PROCEDURE: **Rwy 13,** Climb heading 134° to 1900 before turning right.
NOTES: **Rwy 13,** Trees beginning 1474' from departure end of runway, 556' left of centerline, up to 80' AGL/1539' MSL. Vehicle on road 258' from departure end of runway, 559' from centerline, 15' AGL/1459' MSL. **Rwy 31,** Vehicle on road 465' from departure end of runway, 618' left of centerline, 15' AGL/1446' MSL. Trees beginning 1616' from departure end of runway, 580' right of centerline, up to 80' AGL/1519' MSL. Trees beginning 1110' from departure end of runway, 429' left of centerline, up to 80' AGL/1509' MSL.

JAMESTOWN, ND
JAMESTOWN RGNL (JMS)
AMDT 1 07242 (FAA)
NOTE: **Rwy 22,** antenna and tank beginning 2960' from departure end of runway, 1007' left of centerline, up to 150' AGL/1631' MSL. **Rwy 31,** multiple trees beginning 2129' from departure end of runway 47' right of centerline, up to 60' AGL/1560' MSL.

KINDRED, ND

HAMRY FIELD (K74)

ORIG 10042 (FAA)

NOTE: **Rwy 29,** tree 991' from DER, 367' left of centerline, 38' AGL/982' MSL. Tree 1073' from DER, 221' left of centerline, 38' AGL/982' MSL.

LANGDON, ND

ROBERTSON FIELD (D55)

ORIG 10154 (FAA)

TAKE-OFF MINMUMS: **Rwys 8, 26,** NA - Environmental.

NOTE: **Rwy 14,** vehicles on road beginning 479' to 684' from DER, from 238' to 413' left of centerline, up to 15' AGL/1627' MSL. **Rwy 32,** windsock 13' from DER, 416' right of centerline, 16' AGL/1619' MSL. Fence 24' from DER, 301' left of centerline, 5' AGL/1608' MSL. Fence 199' from DER, 293' left of centerline, 5' AGL/1608' MSL. Trees beginning 485' from DER 203' right of centerline, up to 30' AGL/1628' MSL. Trees beginning 1912' from DER, from 241' to 418' left of centerline, up to 78' AGL/1677' MSL.

LITCHFIELD, MN

LITCHFIELD MUNI (LJF)

AMDT 1 10266 (FAA)

DEPARTURE PROCEDURE: **Rwy 31,** climb heading 316° to 1700 before turning left.

NOTE: **Rwy 13,** trees beginning 11' from DER, 417' left and right of centerline, up to 90' AGL/1234' MSL. Trees beginning 1251' from DER, 830' left of centerline, up to 89' AGL/1228' MSL. **Rwy 31,** trees beginning 958' from DER, 73' left of centerline, up to 46' AGL/1185' MSL. Trees beginning 13' from DER, 370' right of centerline, up to 95' AGL/1234' MSL.

LITTLE FALLS, MN

LITTLE FALLS/MORRISON COUNTY CHARLES A. LINDBERGH FIELD (LXL)

AMDT 3 96172 (FAA)

TAKE-OFF MINIMUMS: **Rwy 13,** 300-1 or std. with a min. climb of 250' per NM to 1500. **Rwy 36,** 600-1½ or std. with a min. climb of 345' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 31**, climb to 1700 before turning.

LONG PRAIRIE, MN

TODD FIELD (14Y)

ORIG 08157 (FAA)

NOTE: **Rwy 16,** tree 273' from departure end of runway, 310' right of centerline, 100' AGL/1436' MSL. **Rwy 34,** tree 70' from departure end of runway, 100' right of centerline, 100' AGL/1439' MSL. Tree 122' from departure end of runway, 105' left of centerline, 100' AGL/1436' MSL. Tree 18' from departure end of runway, 106' right of centerline, 100' AGL/1433' MSL.

LUVERNE, MN

QUENTIN AANENSON FIELD (LYV)

ORIG 10154 (FAA)

NOTE: **Rwy 18,** tree 813' from DER, 578' left of centerline, 50' AGL/1469' MSL. Road plus vehicle 685' from DER, 574' right of centerline, 15' AGL/1454' MSL. Terrain 20' from DER, on centerline, 1429' MSL.
Rwy 36, transmission tower, 5752' from DER, 1036' right of centerline, 139' AGL/1581' MSL.

MANKATO, MN

MANKATO RGNL (MKT)

ORIG 09267 (FAA)

NOTE: **Rwy 4,** trees beginning 447' from DER, 408' right of centerline, up to 100' AGL/1078' MSL. Trees beginning 1996' from DER, 17' left of centerline, up to 100' AGL/1084' MSL. **Rwy 15,** trees beginning 1552' from DER, 719' left of centerline, up to 100' AGL/1088' MSL. **Rwy 22,** trees beginning 2370' from DER, 989' right of centerline, up to 100' AGL/1069' MSL. **Rwy 33,** trees beginning 2085' from DER, 780' right of centerline, up to 100' AGL/1077' MSL. Rising terrain 9' from DER, 65' right of centerline, up to 1029' MSL. Terrain beginning 82' from DER, 60' left of centerline, up to 1029' MSL.

MARSHALL, MN

SOUTHWEST MINNESOTA RGNL MARSHALL/ RYAN FIELD (MML)

AMDT 2 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 20,** Std. w/ min. climb of 270' per NM to 2000, or 1000-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 20,** for climb in visual conditions, cross Marshall Airport at or above 2000 MSL before proceeding on course.

NOTE: **Rwy 12,** Pole 706' from departure end of runway, 671' right of centerline, 60' AGL/1212' MSL, pole 1580' from departure end of runway, 732' left of centerline, 70' AGL/1225' MSL, antenna 1496' from departure end of runway, 620' right of centerline, 64' AGL/1219' MSL, pole 1185' from departure end of runway, 540' right of centerline, 55' AGL/1210' MSL, tree 3564' from departure end of runway, 400' right of centerline, 110' AGL/1269' MSL, tree 2135' from departure end of runway, 113' left of centerline, 77' AGL/1232' MSL. **Rwy 30,** Vehicle on road 1' from departure end of runway, 435' left of centerline, 24' AGL/1200' MSL.

MILBANK, SD

MILBANK MUNI (1D1)

ORIG 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 25,** Std. w/ a min. climb of 207' per NM to 1900, or 900-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 25,** For climb in visual conditions cross Milbank Muni airport at or above 1900 before proceeding on course.

NOTE: **Rwy 7,** trees beginning 1207' from departure end of runway, 387' left of centerline, up to 100' AGL/1219' MSL. Vehicle on road 829' from departure end of runway, 373' right of centerline, 15' AGL/1134' MSL. Building 322' from departure end of runway, 582' right of centerline, 25' AGL/1134' MSL. **Rwy 13,** trees beginning 1448' from departure end of runway, 394' right of centerline, up to 100' AGL/1219' MSL. Vehicle on road 218' from departure end of runway, 490' left of centerline, 15' AGL/1134' MSL. Building 78' from departure end of runway, 397' left of centerline, 25' AGL/1134' MSL. **Rwy 25,** tree 3584' from departure end of runway, 477' left of centerline, 100' AGL/1249' MSL. **Rwy 31,** tree 2992' from departure end of runway, 715' left of centerline, 100' AGL/1239' MSL.

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MILLER, SD

MILLER MUNI (MKA)

ORIG 08269 (FAA)

NOTE: **Rwy 15,** vehicle on road 769' from departure end of runway, 642' right of centerline, 15' AGL/1599' MSL. Snow removal equipment 206' from departure end of runway, 475' right of centerline, 21' AGL/1594' MSL. Tree 3903' from departure end of runway, 998' left of centerline, 100' AGL/1684' MSL. **Rwy 33,** vehicle on road 450' from departure end of runway, 560' left of centerline, 15' AGL/1584' MSL. Tree 762' from departure end of runway, 628' left of centerline, 100' AGL/1669' MSL.

MINNEAPOLIS, MN

AIRLAKE (LVN)

ORIG 10154 (FAA)

NOTE: **Rwy 12,** ground 198' from DER, 533' right of centerline, 0' AGL/963' MSL. Tree and vehicle on road, beginning 422' from DER, 379' right of centerline, up to 15' AGL/978' MSL. Tree 1291' from DER, 506' left of centerline, 62' AGL/1002' MSL. **Rwy 30,** ground 104' from DER, 479' left of centerline, 0' AGL/965' MSL. Tree, pole, and antenna on building beginning 171' from DER, 259' right of centerline, up to 50' AGL/1000' MSL. Tree, railroad, and antenna on building 486' from DER, 268' left of centerline, up to 41' AGL/1001' MSL. Trees and a building beginning 821' from DER, 30' right of centerline, up to 49' AGL/1009' MSL.

ANOKA COUNTY-BLAINE AIRPORT
(JANES FIELD) (ANE)

AMDT 5A 10126 (FAA)

TAKE-OFF MINIMUMS; **Rwy 9,** 300-1½ or std. w/ min. climb of 204' per NM to 1200, or alternatively, with standard takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1200' prior to DER. **Rwy 18,** 300-1 or std. w/ min. climb of 367' per NM to 1200.

DEPARTURE PROCEDURE: **Rwy 9,** climb heading 089° to 2200 before turning right. **Rwy 18,** climb heading 179° to 2600 before turning left. **Rwy 27,** climb heading 269° to 1700 before proceeding southeast bound.
Rwy 36, climb heading 359° to 1700 before proceeding southeast bound.

NOTE: **Rwy 9,** tank and multiple trees beginning 822' from DER, 619' right of centerline, up to 170' AGL/1082' MSL. Trees 2248' from DER, 966' left of centerline, 100' AGL/1009' MSL. **Rwy 18,** aircraft on taxiway 36' from DER, 481' right of centerline, up to 21' AGL/928' MSL. Multiple trees beginning 406' from DER, 287' left of centerline, up to 49' AGL/959' MSL. Tower 5016' from DER, 201' left of centerline, 120' AGL/1078' MSL.
Rwy 27, multiple trees beginning 7' from DER, 235' right of centerline, up to 83' AGL/983' MSL. Multiple trees beginning 558' from DER, 406' left of centerline, up to 57' AGL/957'MSL. **Rwy 36,** multiple trees beginning 86' from DER, 10' right of centerline, up to 87' AGL/987' MSL. Multiple trees beginning 1282' from DER, 53' left of centerline, up to 70' AGL/970' MSL.

MINNEAPOLIS, MN (CON'T)

CRYSTAL (MIC)

AMDT 2 81050 (FAA)

TAKE-OFF MINIMUMS: **Rwys 14L,14R,32L,32R,** 300-1. **Rwys 24L,24R,** 300-1 or std. with a min. climb of 215' per NM to 1000. **Rwys 6L, 6R,** 300-1 or std. with a min. climb of 285' per NM to 1000.

DEPARTURE PROCEDURE: **Rwys 6L,6R,14L,14R,** eastbound departures (050°-130°) climb runway heading to 2800 before turning.

FLYING CLOUD (FCM)

AMDT 4 08157 (FAA)

NOTE: **Rwy 10L,** multiple antenna's on hangar's beginning 270' from departure end of runway, 330' left of centerline, up to 26' AGL/932' MSL. Tree 682' from departure end of runway, 668' right of centerline, 26' AGL/932' MSL. **Rwy 10R,** multiple obstruction light on poles beginning 287' from departure end of runway, 345' right of centerline, up to 36' AGL/939' MSL. Hangar 150' from departure end of runway, 422' right of centerline, 21' AGL/920' MSL. Antenna on building, 536' from departure end of runway, 263' right of centerline, 14' AGL/913' MSL. **Rwy 18,** multiple trees beginning 338' from departure end of runway, 166' left of centerline, up to 62' AGL/961' MSL. Obstruction light on fence 176' from departure end of runway, 127' left of centerline, 10' AGL/910' MSL. Vehicle and road 198' from departure end of runway, 196' left of centerline, 15' AGL/918' MSL. Floodlight 148' from departure end of runway, 374' right of centerline, 38' AGL/938' MSL. Obstruction light on hangar 282' from departure end of runway, 317' right of centerline, 37' AGL/937' MSL. **Rwy 28R,** Hangar 259' from departure end of runway, 355' right of centerline, 18' AGL/931' MSL. **Rwy 36,** wind vane 923' from departure end of runway, 404' left of centerline, 61' AGL/960' MSL. Vent on building 943' from departure end of runway, 295' left of centerline, 44' AGL/943' MSL. Pole 714' from departure end of runway, 351' left of centerline, 33' AGL/932' MSL. Multiple trees beginning 504' from departure end of runway, 324' right of centerline, up to 67' AGL/966' MSL.

21 OCT 2010 to 18 NOV 2010

MINNEAPOLIS, MN (CON'T)

MINNEAPOLIS-ST. PAUL INTL
(WOLD CHAMBERLAIN) (MSP)
AMDT 11 07130 (FAA)

TAKEOFF MINIMUMS: **Rwy 35,** std. with a min. climb of 219' per NM to 2100.

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 043° to 2100 before turning left. **Rwy 30L,** climb heading 299° to 2100 before turning right. **Rwy 30R,** climb heading 299° to 2100 before turning right. **Rwy 35,** climb via heading 348° to 2100 before turning left.

NOTE: **Rwy 4,** multiple trees beginning 800' from departure endof runway, 264' left of centerline, up to 75' AGL/921' MSL. Rod on building 2528' from departure end of runway, 1175' left of centerline, 78' AGL/922' MSL. Fence 803' from departure end of runway, 585' left of centerline, 15' AGL/860' MSL. Antenna on OL building 456' from departure end of runway, 319' left of centerline, 13' AGL/850' MSL. Light poles 1932' from departure end of runway, 718' left of centerline, 45' AGL/885' MSL. Stack 4535' from departure end of runway, 481' left of centerline, 139' AGL/949' MSL. **Rwy 12R,** multiple trees beginning 1477' from departure end of runway, 407' left of centerline, up to 86' AGL/851' MSL. Multiple trees beginning 1426' from departure end of runway, 124' right of centerline, up to 111' AGL/847' MSL. Light pole 1408' from departure end of runway, 746' right of centerline, 85' AGL/843' MSL. Radar RFLTR 983' from departure end of runway, 32' left of centerline, 15' AGL/829' MSL. Pipe on building, 826' from departure end of runway, 576' left of centerline, 10' AGL/825' MSL. Obstruction light on localizer 766' from departure end of runway, on centerline, 7' AGL/821' MSL. **Rwy 17,** antenna 1272' from departure end of runway, 562' right of centerline, 57' AGL/891' MSL. Pole 409' from departure end of runway, 530' right of centerline, 29' AGL/866' MSL. WDI on building 2619' from departure end of runway, 881' left of centerline, 97' AGL/918' MSL. Building 2619' from departure end of runway, 859' left of centerline, 84' AGL/905' MSL. Light 1176' from departure end of runway, 291' right of centerline, 11' AGL/875' MSL. Tree 2619' from departure end of runway, on centerline, 79' AGL/900' MSL. **Rwy 22,** tree 2906' from departure end of runway, 833' right of centerline, 94' AGL/934' MSL. Hopper 1717' from departure end of runway, 456' left of centerline, 48' AGL/888' MSL. **Rwy 30L,** multiple trees beginning 1113' from departure end of runway, 701' left of centerline, up to 80' AGL/919' MSL. Tree 1230' from departure end of runway, 633' right of centerline, 30' AGL/877' MSL. Ground 28' from departure end of runway, 490' right of centerline, 0' AGL/844' MSL. **Rwy 30R,** building 1056' from departure end of runway, 198' left of centerline, 13' AGL/853' MSL. Multiple trees beginning 3010' from departure end of runway, 334' left of centerline, up to 94' AGL/940' MSL. Light pole 1849' from departure end of runway, 698' right of centerline, 17' AGL/871' MSL. Fence 1327' from departure end of runway, 667' right of centerline, 8' AGL/857' MSL. Tree 3703' from departure end of runway, 350' right of centerline, 67' AGL/914' MSL. Rod on pole 3143' from departure end of runway, 47' right of centerline, 38' AGL/898' MSL. **Rwy 35,** tree 175' from departure end of runway, 398' right of centerline, 73' AGL/883' MSL. Multiple trees beginning 1989' from departure end of runway, 351' left of centerline, up to 65' AGL/902' MSL. Multiple buildings beginning 5.45 NM from departure end of runway, 1787' left of centerline, up to 811' AGL/1743' MSL.

MINOT, ND

MINOT INTL (MOT)
AMDT 3 06103 (FAA)

TAKE-OFF MINIMUMS: **Rwy 26,** 300-1½ or std. with a min. climb of 219' per NM to 2000.

DEPARTURE PROCEDURE: **Rwy 13,** climb via heading 128° to 2200 before turning right. **Rwy 26,** climb via heading 260° to 2300 before turning left.

NOTE: **Rwy 8,** tree 1801' from departure end of runway, 292' left of centerline, 56' AGL/1714' MSL. Tree 1459' from departure end of runway, 528' left of centerline, 47' AGL/1705' MSL. **Rwy 26,** tree 1750' from departure end of runway, 618' right of centerline, 71' AGL/1786' MSL. Tree 1829' from departure end of runway, 376' left of centerline, 65' AGL/1780' MSL. Light pole 1110' from departure end of runway, 610' left of centerline, 44' AGL/1759' MSL. Tank 1.1 NM from departure end of runway, 1810' right of centerline, 184' AGL/1899' MSL. Tree 1782' from departure end of runway, 273' right of centerline, 49' AGL/1764' MSL. Light pole 1294' from departure end of runway, 452' right of centerline, 29' AGL/1751' MSL. Tree 2019' from departure end of runway, 393' right of centerline, 54' AGL/1769' MSL. Building 1431' from departure end of runway, 301' right of centerline, 38' AGL/1753' MSL. Light pole 1418' from departure end of runway, 23' right of centerline, 36' AGL/1751' MSL.

MITCHELL, SD

MITCHELL MUNI (MHE)
AMDT 1 86240 (FAA)

DEPARTURE PROCEDURE: **Rwys 12, 17,** climb to 1800 before turning.

MOBRIDGE, SD

MOBRIDGE MUNI(MBG)
ORIG 88154 (FAA)

TAKE-OFF MINIMUMS: **RWY 35,** 300-1.

DEPARTURE PROCEDURE: **Rwys 12, 17, 30, 35,** climb runway heading to 2500 before turning on course.

MONTEVIDEO, MN

MONTEVIDEO-CHIPPEWA COUNTY (MVE)

TAKE-OFF MINIMUMS: **Rwy 21,** 400-1½.

DEPARTURE PROCEDURE: **Rwy 14,** climb runway heading to 1500 before turning.

MOOSE LAKE, MN

MOOSE LAKE CARLTON COUNTY (MZH)
ORIG 94006 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 22,** 300-1.

MORRIS, MN

MORRIS MUNI-CHARLIE SCHMIDT FLD (MOX)
ORIG 08045 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 22,** NA-Environmental.

NOTE: **Rwy 32,** Trees 2888' from departure end of runway, 1125' left of centerline, 100' AGL/1209' MSL.

OAKES, ND

OAKES MUNI (2D5)
ORIG 97142 (FAA)

TAKE-OFF MINIMUMS: **Rwy 30,** 300-1 or std. with a min. climb of 260' per NM to 1700.

OLIVIA, MN
OLIVIA RGNL (OVL)
AMDT 1 86044 (FAA)
TAKE-OFF MINIMUMS: **Rwy 11,** 300-1.

ORR, MN
ORR RGNL (ORB)
AMDT 1 80136 (FAA)
TAKE-OFF MINIMUMS: **Rwy 13,** 500-2 or std. with a min. climb of 260' per NM to 1900.

ORTONVILLE, MN
ORTONVILLE MUNI-MARTINSON FIELD (VVV)
ORIG 81274 (FAA)
TAKE-OFF MINIMUMS: **Rwy 16,** 300-1 or std. with a min. climb of 210' per NM to 1300.

OWATONNA, MN
OWATONNA DEGNER RGNL (OWA)
AMDT 2 97030 (FAA)
DEPARTURE PROCEDURE: **Rwy 12,** climb runway heading to 1500 before turning on course.

PEMBINA, ND
PEMBINA MUNI (PMB)
ORIG 85325 (FAA)
DEPARTURE PROCEDURE: **Rwy 33,** climb runway heading 3200 before turning left.

PERHAM, MN
PERHAM MUNI (16D)
ORIG 98113 (FAA)
TAKE-OFF MINIMUMS: **Rwy 12,** 500-2 or std. with a min. climb of 210' per NM to 2000. **Rwy 30,** 400-1 or std. with a min. climb of 270' per NM to 1800.
DEPARTURE PROCEDURE: **Rwy 12,** climb runway heading to 2000 before proceeding on course. **Rwy 30,** climb runway heading to 1800 before proceeding on course.

PIERRE, SD
PIERRE RGNL (PIR)
AMDT 2 85115 (FAA)
TAKE-OFF MINIMUMS: **Rwy 25,** 300-1.

PINE RIDGE, SD
PINE RIDGE (IEN)
ORIG 97226 (FAA)
TAKE-OFF MINIMUMS: **Rwy 12,** 300-1 or std. with a min. climb of 350' per NM to 3600. **Rwy 24,** 300-1 or std. with a min. climb of 220' per NM to 3500. **Rwy 30,** 300-1 or std. with a min. climb of 300' per NM to 3600.

PIPESTONE, MN
PIPESTONE MUNI (PQN)
ORIG 08045 (FAA)
TAKE-OFF MINIMUMS: **Rwys 9,27,** NA-Environmental.
NOTE: **Rwy 18,** Trees beginning 3811' from departure end of runway, 854' right of centerline, up to 100' AGL/1859' MSL.

PRESTON, MN
FILLMORE COUNTY (FKA)
ORIG 98113 (FAA)
TAKE-OFF MINIMUMS: **Rwys 11,29,** 300-1.

PRINCETON, MN
PRINCETON MUNI (PNM)
AMDT 1 05132 (FAA)
NOTE: **Rwy 15,** trees 982' from departure end of runway, 335' right of centerline, 50' AGL/1029' MSL. Trees 1449' from departure end of runway, 387' left of centerline, 50' AGL/1029' MSL. **Rwy 33,** barn 1159' from departure end of runway, 780' right of centerline, 50' AGL/1139' MSL, multiple trees, terrain, and road beginning 36' from departure end of runway, 84' right of centerline, up to 50' AGL/1045' MSL.

RAPID CITY, SD
RAPID CITY RGNL (RAP)
AMDT 6 07130 (FAA)
DEPARTURE PROCEDURE: **Rwy 5,** climb on heading between 255° clockwise to 210° from departure end of runway, or min. climb of 240' per NM to 8800 for all other courses. **Rwy 14,** climb on heading between 325° clockwise to 210° from departure end of runway, or min. climb of 245' per NM to 8900 for all other courses. **Rwy 23,** climb on heading between 210° counter clockwise to 055° from departure end of runway, or min. climb of 268' per NM to 8900 for all other courses. **Rwy 32,** climb on heading between 255° clockwise to 140° from departure end of runway, or min. climb of 242' per NM to 8800 for all other courses.
NOTE: **Rwy 5,** fence 133' from departure end of runway, 249' left of centerline, 10' AGL/3215' MSL. **Rwy 23,** hangar 201' from departure end of runway, 299' left of centerline, 24' AGL/3193' MSL. Fence 334' from departure end of runway, 256' right of centerline, 10' AGL/3184' MSL. **Rwy 32,** obstruction light 662' from departure end of runway, 243' left of centerline, 54' AGL/3213' MSL. Fence 1002' from departure end of runway, 751' right of centerline, 10' AGL/3233' MSL. Tower 1.9 NM from departure end of runway, 3503' right of centerline, 152' AGL/3520' MSL.

RAY S. MILLER AAF (KRYM)
CAMP RIPLEY, MN . . . . . AMDT 2, 09155
TAKE-OFF OBSTACLES: **Rwy 13**, Terrain 1270' MSL, 73' from DER, 8' left and right of centerline. Vehicle 15' AGL/1180' MSL, 765' from DER, 638' left of centerline. **Rwy 31,** Terrain 1273' MSL, 54' from DER, 9' left and right of centerline. Trees 64' AGL/1282' MSL, 798' from DER, 325' left and right of centerline.

RED WING, MN
RED WING RGNL (RGK)
AMDT 1 01137 (FAA)
DEPARTURE PROCEDURE: **Rwy 9,** 700-4 or std. with a min. climb of 270' per NM to 1700.

REDWOOD FALLS, MN

REDWOOD FALLS MUNI (RWF)

ORIG 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5, 23,** NA-Environmental.

NOTE: **Rwy 12,** numerous buildings beginning 388' from DER, 376' right of centerline, up to 13' AGL/1052' MSL. Numerous fences beginning 6' from DER, 329' right of centerline, up to 13' AGL/1052' MSL. Tree 62' from DER, 444' left of centerline, 11' AGL/1040' MSL. **Rwy 30,** multiple trees beginning 865' from DER, 401' right of centerline, up to 100' AGL/1119' MSL. Vehicle on road 128' from DER, 306' right of centerline, 15' AGL/ 1027' MSL.

ROCHESTER, MN

ROCHESTER INTL (RST)

ORIG 09015 (FAA)

NOTE: **Rwy 2,** road 73' from departure end of runway, 385' right of centerline, 10' AGL/1292' MSL. Tree 4377' from departure end of runway, 1132' right of centerline, 100' AGL/1399' MSL. Road 268' from departure end of runway, 366' right of centerline, 10' AGL/1290' MSL. **Rwy 13,** tree 1498' from departure end of runway, 840' right of centerline, 44' AGL/1348' MSL. **Rwy 20,** pole 259' from departure end of runway, 407' right of centerilne, 23' AGL/1338' MSL. Roads beginning 1' from departure end of runway, 231' right of centerline, up to 10' AGL/1327' MSL. **Rwy 31,** tree 4760' from departure end of runway, 1103' left of centerline, 100' AGL/1389' MSL.

ROSEAU, MN

ROSEAU MUNI-RUDY BILLBERG FIELD (ROX)

ORIG 07242 (FAA)

NOTE: **Rwy 16,** building 258' from departure end of runway, 505' right of centerline, 24' AGL/1078' MSL. Tree 1582' from departure end of runway, 337' left of centerline, 47' AGL/1101' MSL. **Rwy 34,** truck on road 41' from departure end of runway, 511' left of centerline, 15' AGL/1069' MSL.

RUSHFORD, MN

RUSHFORD MUNI (55Y)

AMDT 1 96228 (FAA)

TAKE-OFF MINIMUMS: **Rwy 34,** 300-1 or std. with a min. climb of 300' per NM to 1500.

DEPARTURE PROCEDURE: **Rwy 16,** climb runway heading to 1700 before turning eastbound.

ST. CLOUD, MN

ST. CLOUD RGNL (STC)

ORIG 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5,** 300-1¼ or std. w/ min. climb of 201' per NM to 1300 or alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1100' prior to DER.

NOTE: **Rwy 5,** tower 6201' from DER, 1416' left of centerline, 149' AGL/1179' MSL. Multiple trees beginning 17' from DER, 373' right of centerline, up to 59' AGL/1081' MSL. Multiple trees beginning 1752' from DER, 56' left of centerline, up to 80' AGL/1102' MSL. **Rwy 13,** tree 1654' from DER, 884' right of centerline, 61' AGL/1078' MSL. Tree 1265' from DER, 794' left of centerline, 42' AGL/1059' MSL. **Rwy 23,** trees 2109' from DER, 29' right of centerline, up to 61' AGL/1082' MSL. Trees 1725' from DER, 93' left of centerline, up to 55' AGL/1076' MSL. Fence 74' from DER, 216' left of centerline, 2' AGL, 1023' MSL. **Rwy 31,** terrain beginning 29' from DER, 50' right of centerline, up to 1083' MSL. Terrain beginning 107' from DER, 7' left of centerline, up to 1060' MSL.

ST. JAMES, MN

ST. JAMES MUNI (JYG)

ORIG 94342 (FAA)

DEPARTURE PROCEDURE: **Rwy 15,** climb to 1900 before turning eastbound.

ST. PAUL MN

LAKE ELMO (21D)

ORIG 80318 (FAA)

TAKE-OFF MINIMUMS: **Rwy 22,** 300-1 or std. with a min. climb of 225' per NM to 1100.

ST. PAUL DOWNTOWN HOLMAN FIELD (STP)

AMDT 7 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9,** std. w/ min. climb of 346' per NM to 1500. **Rwy 13,** std. w/ min. climb of 266' per NM to 1500. **Rwy 14,** std. w/ min. climb of 216' per NM to 1500. **Rwy 27,** std. w/ min. climb of 436' per NM to 1500. **Rwy 31**, NA - obstacles. **Rwy 32,** std. w/ min. climb of 340' per NM to 3000.

DEPARTURE PROCEDURE: **Rwy 9,** climb heading 088° to 1500 before proceeding on course. **Rwy 13,** climb heading 125° to 1500 before proceeding on course.

Rwy 14, climb heading 143° to 1500 before proceeding on course. **Rwy 27,** climb heading 268° to 1700 before proceeding on course. **Rwy 32,** climb heading 323° to 1300 before proceeding on course.

NOTE: **Rwy 9,** multiple trees beginning 1265' from departure end of runway, 167' right of centerline, up to 75' AGL/1055' MSL. Multiple trees beginning 1.1 NM from departure end of runway, 124' left of centerline, up to 100' AGL/1099' MSL. Obstruction light tank 1571' from departure end of runway, 771' right of centerline, 50' AGL/811' MSL. Mobile crane 1163' from departure end of runway, 123' left of centerline, 50' AGL/ 758' MSL.

21 OCT 2010 to 18 NOV 2010

ST. PAUL DOWNTOWN HOLMAN FIELD (STP) (CON'T)

Rwy 13, Obstruction light stack 2695' from departure end of runway, 842' right of centerline, 50' AGL/820' MSL. Tree 1563' from departure end of runway, 25' right of centerline, 61' AGL/748' MSL. Multiple trees beginning 1004' from departure end of runway, 607' left of centerline, 50' AGL/767' MSL. Tower 1,725' from departure end of runway, 930' left of centerline, 47' AGL/753' MSL. Vent on building 3029' from departure end of runway, 629' right of centerline, 10' AGL/783' MSL. Multiple bushes beginning 194' from departure end of runway 88' left of centerline, 7'AGL/712' MSL. Stack 1,879' from departure end of runway, 25' left of centerline, 51' AGL/751' MSL. **Rwy 14,** multiple trees beginning 805' from departure end of runway, 2' right of centerline, up to 112' AGL/811' MSL. Multiple trees beginning 1205' from departure end of runway, 64' left of centerline, up to 80' AGL/770' MSL. Poles 2810' from departure end of runway 715' right of centerline, 91' AGL/778' MSL. **Rwy 27,** multiple trees beginning 803' from departure end of runway, 122' left of centerline, up to 100' AGL/994' MSL. Tree 783' from departure end of runway, 105' right of centerline, 25' AGL/725' MSL. Obstruction light antenna 996' from departure end of runway, 304' right of centerline, 67' AGL/ 767' MSL. Light pole 1328' from departure end of runway, 222' left of centerline, 50' AGL/747' MSL. Building 2049' from departure end of runway, 837' right of centerline, 57' AGL/761' MSL. Flagpole 2333' from departure end of runway, 199' left of centerline, 78' AGL/778' MSL. Stack 1.8 NM from departure end of runway, 635' left of centerline, 569' AGL/1279' MSL.
Rwy 32, road and vehicle 211' from departure end of runway, 482' left of centerline, 17' AGL/717' MSL. Railroad beginning 369' from departure end of runway, 329' left of centerline, up to 23' AGL/727' MSL. Pipe on DME 383' from departure end of runway, 269' right of centerline, 17' AGL/722' MSL. Tree 1152' from departure end of runway, 209' left of centerline, 44' AGL/744' MSL. Tree 1685' from departure end of runway, 277' right of centerline, 75' AGL/770' MSL. Sign 5668' from departure end of runway, 1924' left of centerline, 86' AGL/874' MSL. Trees 5614' from departure end of runway, 1796' right of centerline, 100' AGL/939' MSL. Building 5779' from departure end of runway, 1733' right of centerline, 72' AGL/910' MSL. Pole 1.0 NM from departure end of runway, 1835' right of centerline, 157' AGL/973' MSL. Building 1.1 NM from departure end of runway, 2170' left of centerline, 122' AGL/886' MSL. Multiple buildings beginning 1.1 NM from departure end of runway, 378' left of centerline, up to 142' AGL/918' MSL

SILVER BAY, MN

SILVER BAY MUNI (BFW)
ORIG 93035 (FAA)
TAKE-OFF MINIMUMS: **Rwys 7, 25,** 300-1.

SIOUX FALLS, SD

JOE FOSS FIELD (FSD)
AMDT 7 07242 (FAA)
TAKE-OFF MINIMUMS: **Rwy 15,** 200-1 or std. w/ min. climb of 404' per NM to 1700. **Rwy 33,** 200-1¼ or std. w/ min. climb of 343' per NM to1700.
DEPARTURE PROCEDURE: **Rwy 3,** climb heading 030° to 2300 before turning eastbound. **Rwy 9,** climb heading 098° to 2000, then left turn direct FSD VORTAC. **Rwy 15,** climb heading 150° to 2000, then right turn direct FSD VORTAC. **Rwy 21,** climb heading 210° to 2200 before turning eastbound. **Rwy 27,** climb heading 278° to 2100 before turning eastbound. **Rwy 33,** climb heading 330° to 2200 before turning eastbound.
NOTE: **Rwy 9,** antenna 2238' from departure end of runway, 919' right of centerline, 87' AGL/1506' MSL. Pole 1256' from departure end of runway, 23' left of centerline, 43' AGL/1464' MSL. Windsock 331' from departure end of runway, 582' right of centerline, 14' AGL/1433' MSL. **Rwy 15,** antenna 3056' from departure end of runway, 983' left of centerline 117' AGL/1576' MSL. Multiple trees beginning 1211' from departure end of runway, 471' left of centerline, up to 38' AGL/1477' MSL. Tower 3102' from departure end of runway, 972' left of centerline, 61' AGL/1520' MSL. Trees and pole beginning 1746' from departure end of runway, 316' right of centerline, up to 87' AGL/ 1516' MSL. **Rwy 21,** multiple trees beginning 428' from departure end of runway, 522' right of centerline, up to 75' AGL/1497' MSL. **Rwy 27,** multiple trees beginning 2528' from departure end of runway, 1027' left of centerline, up to 100' AGL/1509' MSL. **Rwy 33,** 2 lighted radio towers 3639' from departure end of runway, 894' left of centerline, 88' AGL/1585' MSL, multiple trees beginning 5370' from departure end of runway, 891' left of centerline, up to 175' AGL/1603' MSL, pole 5724' from departure end of runway, 1701' left of centerline, 45' AGL/1594' MSL.

SPEARFISH, SD

BLACK HILLS-CLYDE ICE FIELD (SPF)
TAKE-OFF MINIMUMS: **Rwys 3, 8, 21, 35,** 700-2 (NA at night.). **Rwy 13,** 900-2 or std. with a min. climb of 300' per NM to 5400. **Rwy 17,** NA. **Rwys 26, 31,** 700-2 or std. with a min. climb of 370' per NM to 4700.
DEPARTURE PROCEDURE: **Rwys 3, 8,** turn left. Climb to 6500, intercept the 046° bearing outbound from SPF NDB. Thence... **Rwy 13,** climb runway heading to 4300, then climbing left turn to 6500 via heading 360° to intercept the 046° bearing outbound from SPF NDB. Thence... **Rwys 21, 35,** turn right. Climb to 6500 intercept the 046° bearing outbound from SPF NDB. Thence... **Rwy 26,** climbing right turn to 6500 via heading 330°, intercept the 297° bearing outbound from SPF NDB. Thence... **Rwy 31,** after take-off, intercept 297° bearing outbound from SPF NDB. Climb to 6500. Thence... THENCE...Continue climb to enroute MEA's before proceeding on course.

STAPLES, MN

STAPLES MUNI (SAZ)
AMDT 2 87211 (FAA)
TAKE-OFF MINIMUMS: **Rwy 14,** 400-2.

STURGIS, SD
STURGIS MUNI (49B)
ORIG 96284 (FAA)
DEPARTURE PROCEDURE: **Rwy 11,** climb runway heading to 6000, then direct RAP VORTAC.
Rwy 29, climb runway heading to 5000, then climbing right turn to 6000 direct RAP VORTAC.

THIEF RIVER FALLS, MN
THIEF RIVER FALLS RGNL (TVF)
ORIG 09071 (FAA)
NOTE: **Rwy 3,** trees beginning 3058' from DER, 678' right of centerline, up to 100' AGL/1229' MSL. **Rwy 13,** trees beginning 565' from DER, 372' left of centerline, up to 100' AGL/1214' MSL. Trees beginning 1337' from DER, 531' right of centerline, up to 100' AGL/1209' MSL. **Rwy 21,** trees beginning 214' from DER, 544' right of centerline, up to 100' AGL/1204' MSL. Trees beginning 2185' from DER, 33' left of centerline, up to 100' AGL/1209' MSL. **Rwy 31,** trees beginning 126' from DER, 410' right of centerline, up to 100' AGL/1214' MSL. Trees beginning 199' from DER, 413' left of centerline, up to 100' AGL/1209' MSL. Trees beginning 1204' from DER, 449' right of centerline, up to 100' AGL/1199' MSL. Trees beginning 1579' from DER, 495' left of centerline, up to 100' AGL/1214' MSL.

TIOGA, ND
TIOGA MUNI (D60)
ORIG 09239 (FAA)
TAKE-OFF MINIMUMS: **Rwys 3, 21,** NA-Environmental.
NOTE: **Rwy 12,** vehicle on road 1243' from DER, 78' left of centerline, 15' AGL/2304' MSL. Vehicle on road, tree and pole beginning 618' from DER, 50' right of centerline, up to 100' AGL/2419' MSL. Ground 21' from DER, 481' right of centerline, 2272' MSL. **Rwy 30,** vehicle on road 1' from DER, 144' left of centerline, 15' AGL/2256' MSL.

TOWER, MN
TOWER MUNI (12D)
ORIG 09127 (FAA)
TAKE-OFF MINIMUMS: **Rwy 8,** NA - Obstacles.
NOTE: **Rwy 26,** tree 2315' from DER, 700' right of centerline, 100' AGL/1479' MSL.

VALLEY CITY, ND
BARNES COUNTY MUNI (BAC)
ORIG 10098 (FAA)
NOTE: **Rwy 13,** vehicle on road, 111' from DER, 356' right of centerline, 15' AGL/1396' MSL. Trees beginning 644' from DER, 242' right of centerline, up to 40' AGL/1421' MSL. **Rwy 31,** terrain beginning 32' from DER, 20' right of centerline, up to 1424' MSL. Vehicle on road 38' from DER, 285' right of centerline, 15' AGL/1418' MSL. Fence 71' from DER, 292' left of centerline, 4' AGL/1407' MSL. Terrain beginning 120' from DER, 125' left of centerline, up to 1447' MSL. Fence 198' from DER, 299' right of centerline, 4' AGL/1408' MSL. Trees beginning 365' from DER, 10' left of centerline, up to 40' AGL/1457' MSL. Tree 545' from DER, 607' right of centerline, 16' AGL/1436' MSL.

VERMILLION, SD
HAROLD DAVIDSON FIELD (VMR)
AMDT 1 09239 (FAA)
NOTE: **Rwy 12,** road 1' from DER, 200' right of centerline, up to 15' AGL/1156' MSL. Multiple trees beginning 541' from DER, 366' right of centerline, up to 62' AGL/1202' MSL. **Rwy 30,** road 79' from DER 342' left of centerline 15' AGL/1155' MSL. Road 200' from DER, 450' right of centerline, 15' AGL/1160' MSL. Fence 199' from DER, 347' left of centerline, 6' AGL/1150' MSL.

WAHPETON, ND
HARRY STERN (BWP)
ORIG 93259 (FAA)
TAKE-OFF MINIMUMS: **Rwy 3**, 300-1.

WARREN, MN
WARREN MUNI (D37)
ORIG 02108 (FAA)
DEPARTURE PROCEDURE: **Rwy 30,** climb runway heading to 1400 before turning on course.

WARROAD, MN
WARROAD INTL MEMORIAL (RRT)
ORIG 08101 (FAA)
TAKE-OFF MINIMUMS: **Rwys 4, 22,** NA-Environmental.

WASECA, MN
WASECA MUNI (ACQ)
ORIG 09015 (FAA)
NOTE: **Rwy 15,** tree 560' from departure end of runway, 560' right of centerline, 100' AGL/1239' MSL. Terrain beginning 172' from departure end of runway, on centerline, up to 1149' MSL. **Rwy 33,** tree 5042' from departure end of runway, 1533' right of centerline, 100' AGL/1259' MSL.

WATERTOWN, SD
WATERTOWN RGNL (ATY)
ORIG 07242 (FAA)
NOTE: **Rwy 12,** tree 2015' from departure end of runway, 328' right of centerline, 100' AGL/1783' MSL. **Rwy 30,** trees 2149' from departure end of runway, 10' right of centerline, 51' AGL/1810' MSL. Tree 2200' from departure end of runway, 441' left of centerline, 70' AGL/1810' MSL. Tree 2082' from departure end of runway, 121' right of centerline, 55' AGL/1806' MSL.

WATFORD CITY, ND
WATFORD CITY MUNI (S25)
AMDT 1 10154 (FAA)
TAKE-OFF MINIMUMS: **Rwy 12,** 400-1¼ or std. with a min. climb of 462' per NM to 2600. **Rwys 18, 36,** NA-Environmental.
NOTE: **Rwy 12,** tree 5528' from DER, 1819' right of centerline, up to 100' AGL/2439' MSL. Vehicle on road, trees, and terrain beginning 186' from DER, 62' right of centerline, up to 100' AGL/2258' MSL. Vehicle on road, fence, and terrain beginning 90' from DER, 43' left of centerline, up to 27' AGL/2167' MSL.
Rwy 30, trees and buildings beginning 672' from DER, 119' right of centerline, up to 41' AGL/2101' MSL. Vehicle on road, light and trees beginning 199' from DER, 128' left of centerline, up to 59' AGL/2119' MSL.

21 OCT 2010 to 18 NOV 2010

WHEATON, MN

WHEATON MUNI (ETH)
AMDT 1 92177 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** 300-1. **Rwys 4, 22,** NA.

WILLISTON, ND

SLOULIN FIELD INTL (ISN)
AMDT 4 10210 (FAA)

TAKE-OFF MINIMUMS: **Rwy 29,** 400-2¼ or std. with a min. climb of 359' per NM to 2200.

DEPARTURE PROCEDURE: **Rwy 11,** climb heading 115° to 2400 before turning left.

NOTE: **Rwy 2,** trees 1212' from DER, 398' left of centerline, up to 100' AGL/2019' MSL. **Rwy 11,** trees 831' from DER, 686' right of centerline, up to 100' AGL/1999' MSL. **Rwy 20,** trees 610' from DER, 450' right of centerline, up to 100' AGL/2019' MSL. Trees 1204' from DER, 128' left of centerline, up to 100' AGL/2019' MSL. Poles beginning from DER, 61' right of centerline, up to 44' AGL/1954' MSL. Building 1811' from DER, 371' right of centerline, 65' AGL/1980' MSL. **Rwy 29,** terrain beginning 639' from DER, 179' left of centerline, up to 2150' MSL. Terrain beginning 645' from DER, 305' right of centerline, up to 2103' MSL. Fence 1341' from DER, 210' right of centerline, 10' AGL/2021' MSL. Fence beginning 966' from DER, 250' left of centerline, up to 10' AGL/2029' MSL. Obstruction light on LOC 999' from DER, on centerline, 5' AGL/2014' MSL. Antenna on building 1000' from DER, 270' right of centerline, 29' AGL/2018' MSL. CHY on building 1165' from DER, 791' right of centerline, 29' AGL/2040' MSL. Building 2345' from DER, 519' left of centerline, 29' AGL/2066' MSL. T-L tower 3480' from DER, 237' right of centerline, 77' AGL/2137' MSL. Obstruction light pole 3478' from DER, 247' right of centerline, 82' AGL/2137' MSL. Rod on obstruction light pole 3692' from DER, 392' left of centerline, 68' AGL/2147' MSL. T-L tower 3700' from DER, 403' left of centerline, 82' AGL/2147' MSL. Tree 1.2 NM from DER, 1557' right of centerline, 27' AGL/2186' MSL. Tree 1.9 NM from DER, 2091' right of centerline, 100' AGL/2309' MSL.

WILLMAR, MN

WILLMAR MUNI-JOHN L. RICE FIELD (BDH)
ORIG 06327 (FAA)

NOTE: **Rwy 31,** tree 1338' from departure end of runway, 740' left of centerline, 67' AGL/1193' MSL.

WINNER, SD

WINNER RGNL (ICR)
AMDT 3 09127 (FAA)

TAKE-OFF MINIMUMS: **Rwys 3, 21,** NA-Environmental.

WINONA, MN

WINONA MUNI-MAX CONRAD FIELD (ONA)
AMDT 3 96228 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12,** 300-1 or std. with a min. climb of 320' per NM to 800. **Rwy 17,** 600-1 or std. with a min. climb of 500' per NM to 1300. **Rwy 30,** 500-1 or std. with a min. climb of 500' per NM to 1200. **Rwy 35,** 700-1 or std. with a min. climb of 390' per NM to 1500.

DEPARTURE PROCEDURE: **Rwy 12,** climb to 1900 via ONA R-110 before turning. **Rwys 17, 30, 35,** climb runway heading to 1900 before turning.

WORTHINGTON, MN

WORTHINGTON MUNI (OTG)
AMDT 2 88154 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17,** 300-1.

DEPARTURE PROCEDURE: **Rwys 11, 17, 29, 35,** when weather is below 800-1 climb runway heading to 2400 before turning.

YANKTON, SD

CHAN GURNEY MUNI (YKN)
AMDT 2 85003 (FAA)

TAKE-OFF MINIMUMS: **Rwy 31,** 300-1.

DEPARTURE PROCEDURE: **Rwys 1, 13, 19, 31,** climb runway heading to 2400 before turning.

21 OCT 2010 to 18 NOV 2010

ADA–TWIN VALLEY

NORMAN CO ADA–TWIN VALLEY (DØØ) 5 SE UTC−6(−5DT) N47°15.63′ W96°24.02′ **TWIN CITIES L–14H IAP**

954 B **FUEL** 100LL TPA—1754(800) NOTAM FILE PNM

RWY 15–33: H3103X60 (ASPH) LIRL 0.5% up SE

RWY 15: Tree. **RWY 33:** Tree.

AIRPORT REMARKS: Unattended. For fuel call 218–784–4381/2962. Ultralights on and invof arpt. Rwy 15–33 cracking and surface erosion. Rwy 15–33 several lights out others leaning.

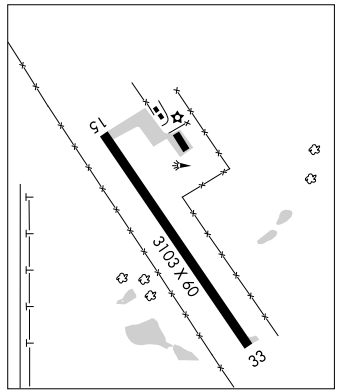
COMMUNICATIONS: CTAF 122.9

Ⓡ **FARGO APP/DEP CON** 120.4 (1200–0500Z‡)

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.35 (0500–1200Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE FAR.

FARGO (H) VORTACW 116.2 FAR Chan 109 N46°45.20′ W96°51.08′ 022° 35.6 NM to fld. 910/9E. **HIWAS.**



AIRLAKE (See MINNEAPOLIS)

AITKIN MUNI–STEVE KURTZ FLD (AIT) 2 NE UTC−6(−5DT) N46°32.91′ W93°40.61′ **TWIN CITIES L–14H IAP**

1205 B S2 **FUEL** 100LL, JET A TPA—2005(800) NOTAM FILE AIT

RWY 16–34: H4018X75 (ASPH) S–12.5 MIRL

RWY 16: REIL. VASI(V2L)—GA 3.0° TCH 26′.

RWY 34: REIL. VASI(V2L)—GA 3.0° TCH 39′.

RWY 08–26: 3335X150 (TURF)

RWY 08: Trees. **RWY 26:** Trees.

AIRPORT REMARKS: Attended Nov–Apr 1500–2200Z‡, May–Oct 1500–2300Z‡. For svc after hrs call 218–845–2808, 218–821–1622, 218–820–5114. Rwy 08–26 CLOSED Nov–Apr. Rwy 08–26 marked with yellow cones. Rwy 08–26 ski equipped acft only Nov–Apr, call 218–927–4104 for rwy conditions. ACTIVATE MIRL Rwy 16–34, VASI Rwy 16 and Rwy 34 and REIL Rwy 16 and Rwy 34—CTAF.

WEATHER DATA SOURCES: AWOS–3 118.675 (218) 927–2101.

COMMUNICATIONS: CTAF/UNICOM 123.05

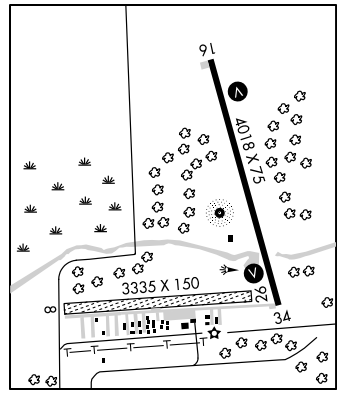
MINNEAPOLIS CENTER APP/DEP CON 118.05

GCO 121.725 (MINNEAPOLIS CENTER and PRINCETON RADIO)

RADIO AIDS TO NAVIGATION: NOTAM FILE BRD.

BRAINERD (H) VORTACW 116.9 BRD Chan 116 N46°20.89′ W94°01.55′ 047° 18.8 NM to fld. 1260/3E.

NDB (MHW) 397 AIT N46°32.85′ W93°40.52′ at fld. (Unmonitored). NOTAM FILE AIT.

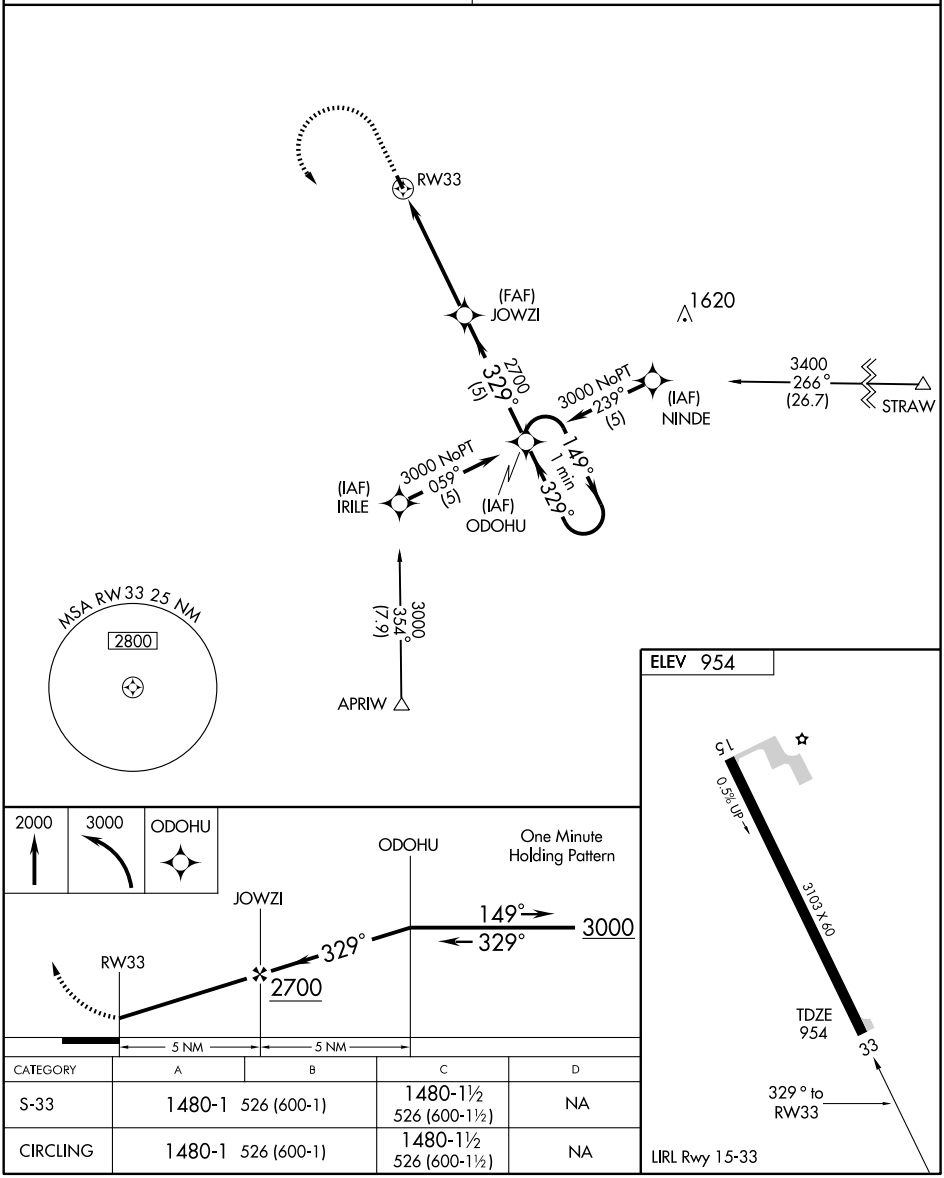


APP CRS	Rwy Idg	3103
329°	TDZE	954
	Apt Elev	954

GPS RWY 33

ADA/TWIN VALLEY/ NORMAN COUNTY ADA/TWIN VALLEY (D00)

NA	Use Hector Intl, ND altimeter setting.	MISSED APPROACH: Climb to 2000, then climbing left turn to 3000 direct ODOHU WP and hold.
FARGO APP CON* 120.4 377.15		CTAF 122.9



CATEGORY	A	B	C	D
S-33	1480-1	526 (600-1)	1480-1½ 526 (600-1½)	NA
CIRCLING	1480-1	526 (600-1)	1480-1½ 526 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ADA–TWIN VALLEY

NORMAN CO ADA–TWIN VALLEY (DØØ) 5 SE UTC−6(−5DT) N47°15.63′ W96°24.02′ **TWIN CITIES L–14H IAP**

954 B **FUEL** 100LL TPA—1754(800) NOTAM FILE PNM

RWY 15–33: H3103X60 (ASPH) LIRL 0.5% up SE

RWY 15: Tree. **RWY 33:** Tree.

AIRPORT REMARKS: Unattended. For fuel call 218–784–4381/2962. Ultralights on and invof arpt. Rwy 15–33 cracking and surface erosion. Rwy 15–33 several lights out others leaning.

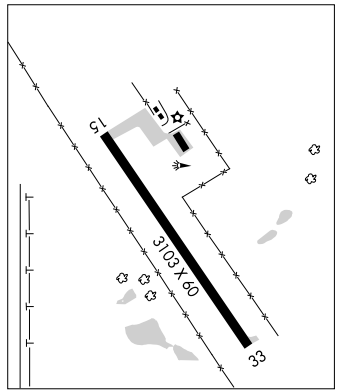
COMMUNICATIONS: CTAF 122.9

Ⓡ **FARGO APP/DEP CON** 120.4 (1200–0500Z‡)

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.35 (0500–1200Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE FAR.

FARGO (H) VORTACW 116.2 FAR Chan 109 N46°45.20′ W96°51.08′ 022° 35.6 NM to fld. 910/9E. **HIWAS.**



AIRLAKE (See MINNEAPOLIS)

AITKIN MUNI–STEVE KURTZ FLD (AIT) 2 NE UTC−6(−5DT) N46°32.91′ W93°40.61′ **TWIN CITIES L–14H IAP**

1205 B S2 **FUEL** 100LL, JET A TPA—2005(800) NOTAM FILE AIT

RWY 16–34: H4018X75 (ASPH) S–12.5 MIRL

RWY 16: REIL. VASI(V2L)—GA 3.0° TCH 26′.

RWY 34: REIL. VASI(V2L)—GA 3.0° TCH 39′.

RWY 08–26: 3335X150 (TURF)

RWY 08: Trees. **RWY 26:** Trees.

AIRPORT REMARKS: Attended Nov–Apr 1500–2200Z‡, May–Oct 1500–2300Z‡. For svc after hrs call 218–845–2808, 218–821–1622, 218–820–5114. Rwy 08–26 CLOSED Nov–Apr. Rwy 08–26 marked with yellow cones. Rwy 08–26 ski equipped acft only Nov–Apr, call 218–927–4104 for rwy conditions. ACTIVATE MIRL Rwy 16–34, VASI Rwy 16 and Rwy 34 and REIL Rwy 16 and Rwy 34—CTAF.

WEATHER DATA SOURCES: AWOS–3 118.675 (218) 927–2101.

COMMUNICATIONS: CTAF/UNICOM 123.05

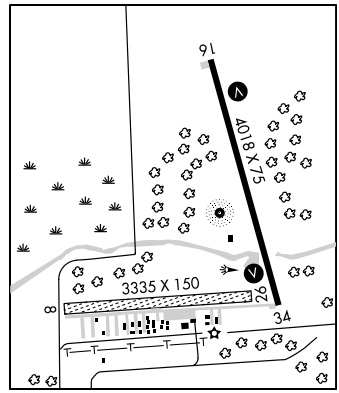
MINNEAPOLIS CENTER APP/DEP CON 118.05

GCO 121.725 (MINNEAPOLIS CENTER and PRINCETON RADIO)

RADIO AIDS TO NAVIGATION: NOTAM FILE BRD.

BRAINERD (H) VORTACW 116.9 BRD Chan 116 N46°20.89′ W94°01.55′ 047° 18.8 NM to fld. 1260/3E.

NDB (MHW) 397 AIT N46°32.85′ W93°40.52′ at fld. (Unmonitored). NOTAM FILE AIT.



NDB AIT 397	APP CRS 165°	Rwy Idg 4018 TDZE 1205 Apt Elev 1205

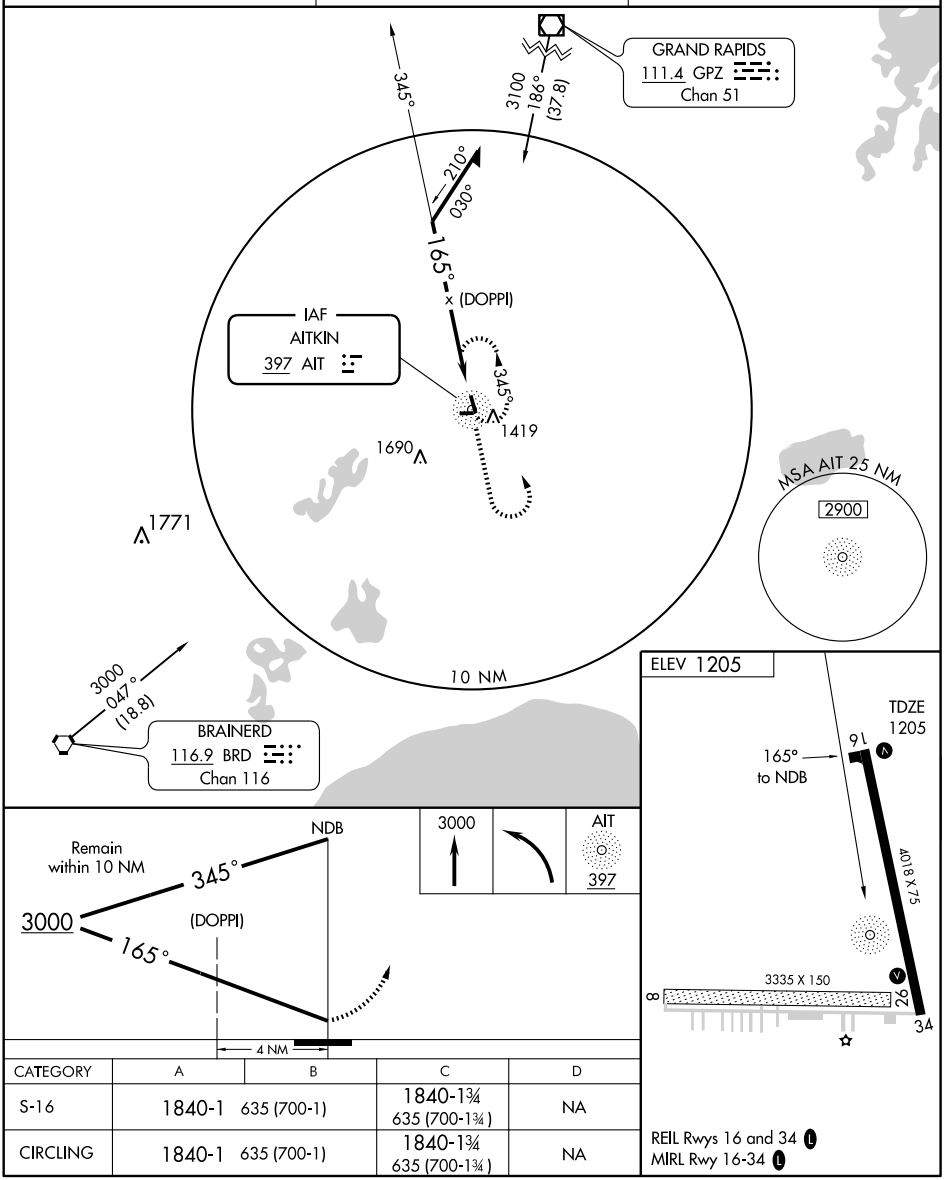
NDB or GPS RWY 16

AITKIN MUNI-STEVE KURTZ FIELD (AIT)

NA

MISSED APPROACH: Climb to 3000 then left turn direct AIT NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.675	118.05 239.0	123.05 (CTAF) L

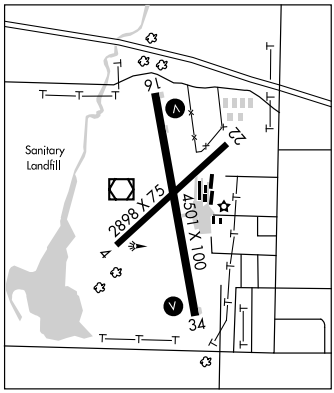


CATEGORY	A	B	C	D
S-16	1840-1	635 (700-1)	1840-1¾ 635 (700-1¾)	NA
CIRCLING	1840-1	635 (700-1)	1840-1¾ 635 (700-1¾)	NA

REIL Rwys 16 and 34 L
MIRL Rwy 16-34 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

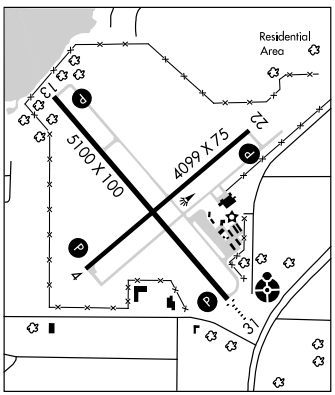
ALBERT LEA MUNI (AEL) 3 N UTC−6(−5DT) N43°40.89′ W93°22.04′ OMAHA
1260 B **FUEL** 100LL, JET A, MOGAS TPA—2000(740) NOTAM FILE AEL L–12J
RWY 16–34: H4501X100 (ASPH) S–19, D–29 MIRL IAP
RWY 16: REIL. VASI(V2L).
RWY 34: REIL. VASI(V2L). Tree.
RWY 04–22: H2898X75 (ASPH)
Rwy 04: Trees.
AIRPORT REMARKS: Attended Apr–Oct Mon–Fri 1400–0200Z‡, Nov–Mar Mon–Fri 1400–2300Z‡, Sat–Sun 1400–2300Z‡. For svc after hrs call 507–826–3451. MOGAS pump not marked. Ultralights , gliders and helicopters use turf parallel to Rwy 16–34 on E side and approach area to Rwy 22. TV tower 9.5 NM SE. Days: ACTIVATE MIRL Rwy 16–34, VASI and REIL Rwy 16 and Rwy 34—CTAF. Ngts: VASI, MIRL ints preset to increase ints and ACTIVATE REIL Rwys 16 and 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 109.8 AEL (507) 377–1583.
COMMUNICATIONS: CTAF/UNICOM 123.0
RCO 122.05 (PRINCETON RADIO)
Ⓡ **ROCHESTER APP/DEP CON** 119.8 (1100–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 135.35 (0500–1100Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE AEL.
(T) VORW/DME 109.8 AEL Chan 35 N43°40.91 W93°22.25′ at fld. 1265/6E. **AWOS–3.** Unmonitored.



ALEXANDRIA N45°57.50′ W95°13.96′ NOTAM FILE AXN. TWIN CITIES
(L) VORW/DME 112.8 AXN Chan 75 224° 8.8 NM to Chandler Fld. 1367/7E. **HIWAS.** L–14H
VOR/DME unusable byd 30 NM blo 3500′.
RCO 122.6 (PRINCETON RADIO)

ALEXANDRIA

CHANDLER FLD (AXN) 2 SW UTC−6(−5DT) N45°51.98′ W95°23.68′ TWIN CITIES
1425 B S4 **FUEL** 100LL, JET A NOTAM FILE AXN H–2J, L–14H
RWY 13–31: H5100X100 (ASPH) S–35, D–60 MIRL IAP
RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 34′. Trees.
RWY 31: ODALS. PAPI(P4L)—GA 3.0° TCH 50′.
RWY 04–22: H4099X75 (ASPH) S–35, D–60 MIRL
RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 44′. Tree.
RWY 22: REIL. PAPI(P4L)—GA 3.0° TCH 44′. Tree.
AIRPORT REMARKS: Attended May–Oct, Mon–Fri 1400–0200Z‡, Nov–Apr, Mon–Fri 1400–0000Z‡. Sat–Sun, 1500–2300Z‡. Holidays 1500–2300Z‡. For attendant after hours call 320–492–6652. CAUTION, occasional parachute jumping over arpt. Check NOTAMS. Ultralight tfc on and invof arpt. Waterfowl and jackrabbits on and invof rwys. MIRL Rwy 13–31 preset on low ints, to ACTIVATE higher ints and MIRL Rwy 04–22, PAPI Rwy 04, Rwy 22, Rwy 13 and Rwy 31, REIL Rwy 04, Rwy 22, Rwy 13 and ODALS Rwy 31—CTAF.
WEATHER DATA SOURCES: ASOS 118.375 (320) 763–7174. **HIWAS** 112.8 AXN.
COMMUNICATIONS: CTAF/UNICOM 123.0
ALEXANDRIA RCO 122.6 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 126.1
RADIO AIDS TO NAVIGATION: NOTAM FILE AXN.
ALEXANDRIA (L) VORW/DME 112.8 AXN Chan 75 N45°57.50′ W95°13.96′ 224° 8.8 NM to fld. 1367/7E. **HIWAS.**
TAMIE NDB (MHW/LOM) 374 EE N45°47.50′ W95°18.33′ 316° 5.8 NM to fld.
ILS 110.5 I–EEZ Rwy 31. LOM TAMIE NDB.



ANOKA CO–BLAINE ARPT (JANES FLD) (See MINNEAPOLIS)

WAAS	APP CRS	Rwy Idg	4501
CH 49204	163°	TDZE	1260
W16A		Apt Elev	1260

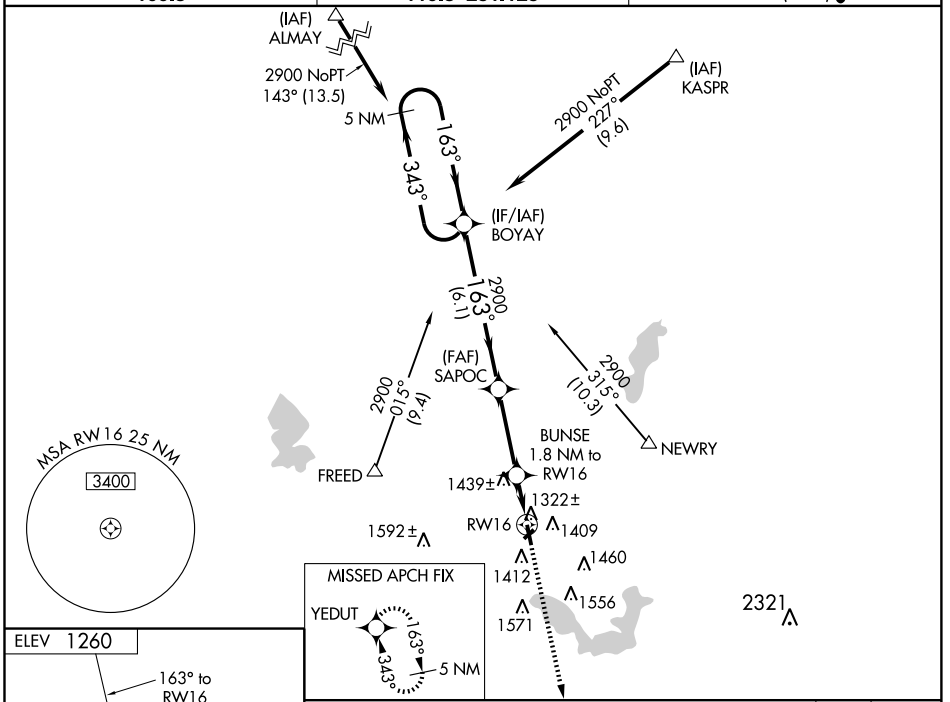
RNAV (GPS) RWY 16

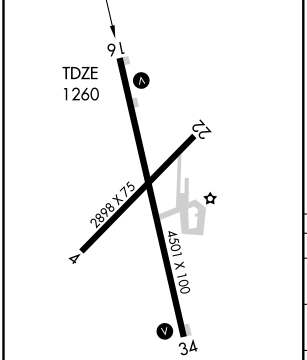
ALBERT LEA MUNI (AEL)

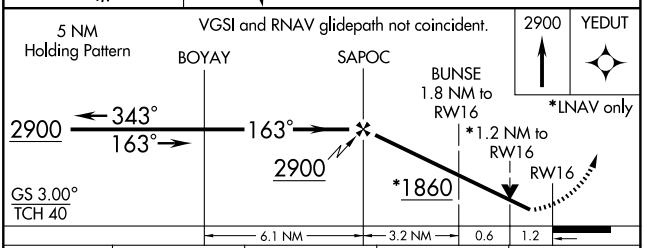
Baro-VNAV NA when using Austin Muni altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). Visibility reduction for helicopters NA.
If local altimeter setting not received, use Austin Muni altimeter setting and increase all DAs 48 feet and all MDAs 60 feet.
VDP NA when using Austin Muni altimeter setting. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2900 direct YEDUT and hold.

AWOS-3	ROCHESTER APP CON *	UNICOM
109.8	119.8 251.125	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1510-1 250 (300-1)			
LNAV/VNAV DA	1592-1¼ 332 (400-1¼)			
LNAV MDA	1700-1 440 (500-1)		1700-1¼ 440 (500-1¼)	1700-1½ 440 (500-1½)
CIRCLING	1780-1 520 (600-1)		1780-1½ 520 (600-1½)	1820-2 560 (600-2)

MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 34

ALBERT LEA MUNI (AEL)

APP CRS	Rwy Idg	4501
343°	TDZE	1256
	Apt Elev	1259

T
A NA

GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.
IAF ARM APPROACH MODE PRIOR TO IAF.

MISSED APPROACH: Climb to 2900 direct BOYAY WP and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
109.8	119.8 251.125	123.0 (CTAF) L

MISSED APCH FIX

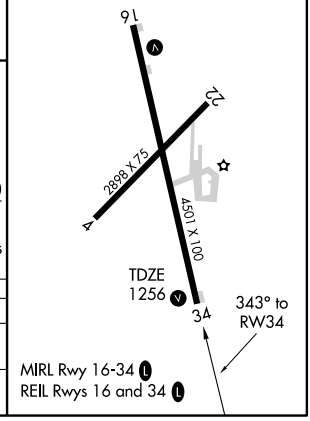
5 NM 163° 343° BOYAY

MSA RW34 25 NM
3400

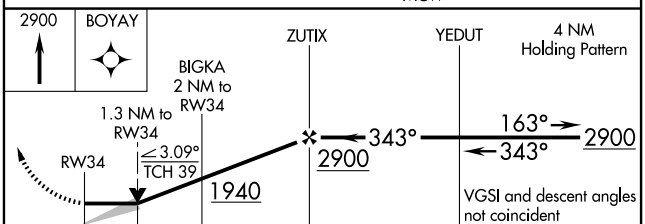
1409
1592±
1412 RW34
1460
BIGKA
2 NM to
RW34
1556
1571
2321
(FAF)
ZUTIX
2900 (6) 343°
GOTHE
2900
196° (3.3)
(IF/IAF)
YEDUT
(IAF)
HIBLO
2900 NoPT
061°
(5.3)
163°
343°
4 NM
2900 NoPT
357°
(24.1)
IAF
MASON CITY
MCW

Procedure NA for arrivals at MCW VORTAC on airway radials 343 CW 032.

ELEV 1259



MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L



CATEGORY	A	B	C	D
LNAV MDA	1720-1	464 (500-1)	1720-1¼ 464 (500-1¼)	1720-1½ 464 (500-1½)
CIRCLING	1780-1	521 (600-1)	1780-1½ 521 (600-1½)	1820-2 561 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME AEL	APP CRS	Rwy Idg	4501
109.8	335°	TDZE	1256
Chan 35		Apt Elev	1259

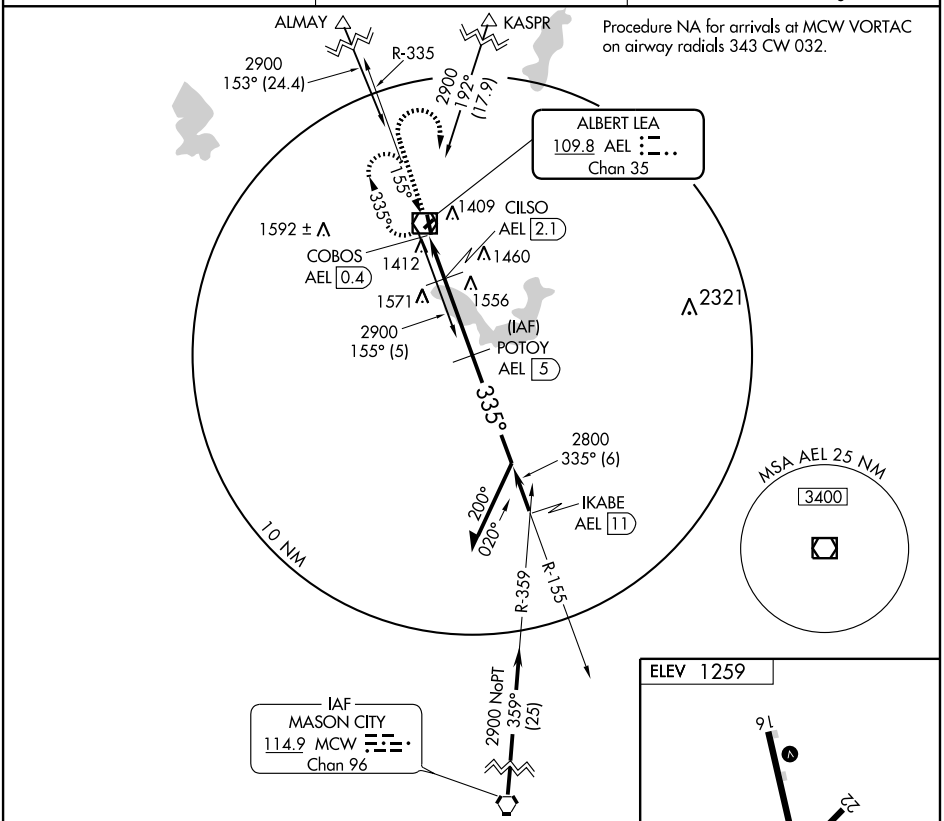
VOR/DME RWY 34

ALBERT LEA MUNI (AEL)

NA

MISSED APPROACH: Climb to 2100 then climbing right turn to 2900 direct AEL VOR/DME and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
109.8	119.8 251.125	123.0 (CTAF) L



CATEGORY	A	B	C	D
S-34	1720-1 464 (500-1)		1720-1¼ 464 (500-1¼)	1720-1½ 464 (500-1½)
CIRCLING	1780-1 521 (600-1)		1780-1½ 521 (600-1½)	1820-2 561 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME AEL 109.8 Chan 35	APP CRS 175°	Rwy Idg 4501 TDZE 1259 Apt Elev 1259

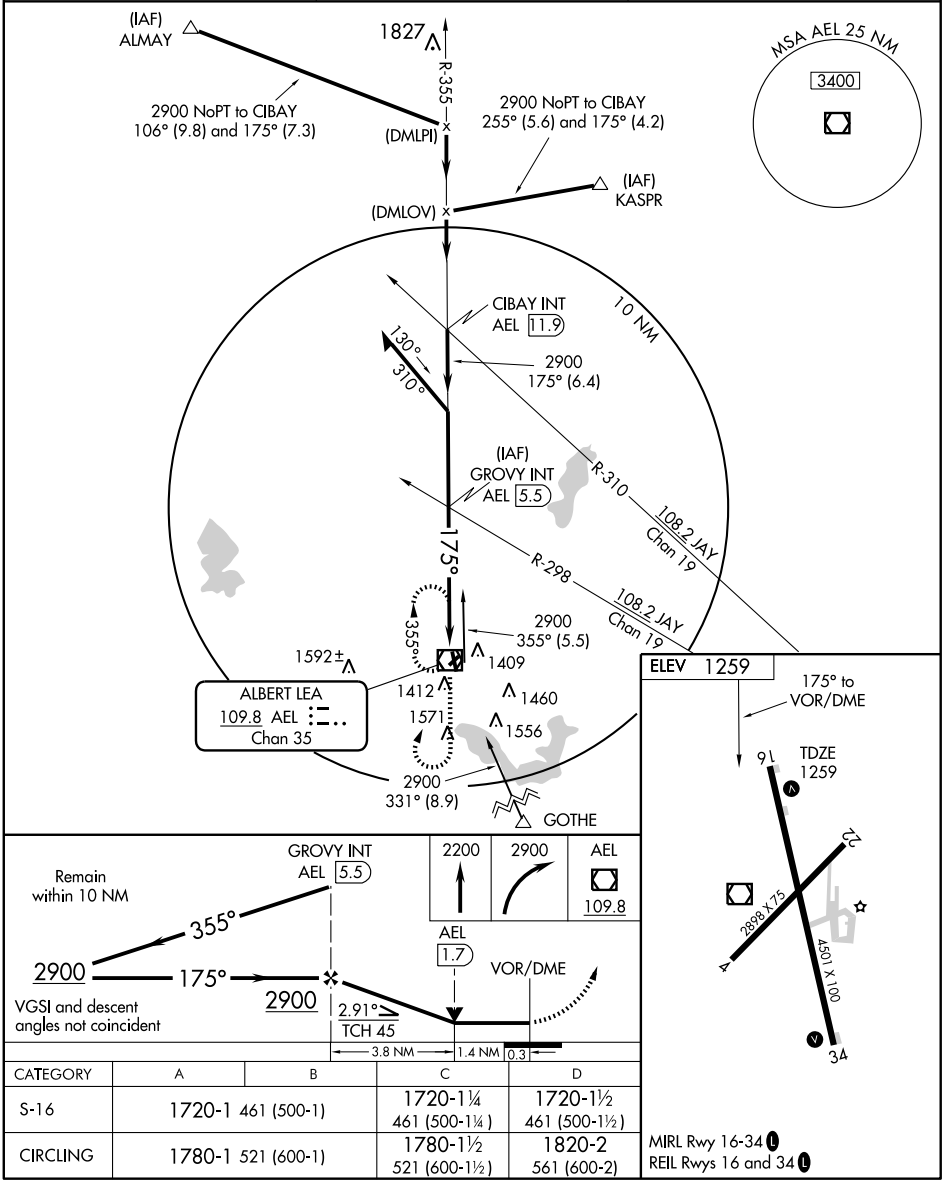
VOR RWY 16

ALBERT LEA MUNI (AEL)

T
NA

MISSED APPROACH: Climb to 2200 then climbing right turn to 2900 direct AEL VOR/DME and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
109.8	119.8 251.125	123.0 (CTAF) L

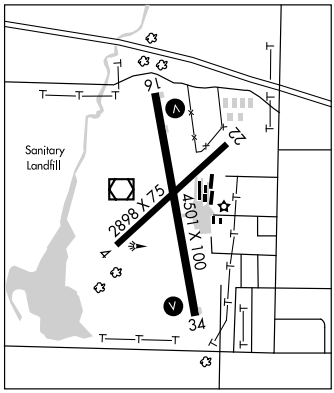


CATEGORY	A	B	C	D
S-16	1720-1 461 (500-1)		1720-1¼ 461 (500-1¼)	1720-1½ 461 (500-1½)
CIRCLING	1780-1 521 (600-1)		1780-1½ 521 (600-1½)	1820-2 561 (600-2)

MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

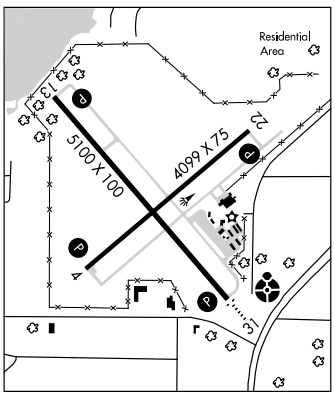
ALBERT LEA MUNI (AEL) 3 N UTC−6(−5DT) N43°40.89′ W93°22.04′ OMAHA
1260 B **FUEL** 100LL, JET A, MOGAS TPA—2000(740) NOTAM FILE AEL L–12J
RWY 16–34: H4501X100 (ASPH) S–19, D–29 MIRL IAP
RWY 16: REIL. VASI(V2L).
RWY 34: REIL. VASI(V2L). Tree.
RWY 04–22: H2898X75 (ASPH)
Rwy 04: Trees.
AIRPORT REMARKS: Attended Apr–Oct Mon–Fri 1400–0200Z‡, Nov–Mar Mon–Fri 1400–2300Z‡, Sat–Sun 1400–2300Z‡. For svc after hrs call 507–826–3451. MOGAS pump not marked. Ultralights , gliders and helicopters use turf parallel to Rwy 16–34 on E side and approach area to Rwy 22. TV tower 9.5 NM SE. Days: ACTIVATE MIRL Rwy 16–34, VASI and REIL Rwy 16 and Rwy 34—CTAF. Ngts: VASI, MIRL ints preset to increase ints and ACTIVATE REIL Rwys 16 and 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 109.8 AEL (507) 377–1583.
COMMUNICATIONS: CTAF/UNICOM 123.0
RCO 122.05 (PRINCETON RADIO)
Ⓡ **ROCHESTER APP/DEP CON** 119.8 (1100–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 135.35 (0500–1100Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE AEL.
(T) VORW/DME 109.8 AEL Chan 35 N43°40.91 W93°22.25′ at fld. 1265/6E. **AWOS–3.** Unmonitored.



ALEXANDRIA N45°57.50′ W95°13.96′ NOTAM FILE AXN. TWIN CITIES
(L) VORW/DME 112.8 AXN Chan 75 224° 8.8 NM to Chandler Fld. 1367/7E. **HIWAS.** L–14H
VOR/DME unusable byd 30 NM blo 3500′.
RCO 122.6 (PRINCETON RADIO)

ALEXANDRIA

CHANDLER FLD (AXN) 2 SW UTC−6(−5DT) N45°51.98′ W95°23.68′ TWIN CITIES
1425 B S4 **FUEL** 100LL, JET A NOTAM FILE AXN H–2J, L–14H
RWY 13–31: H5100X100 (ASPH) S–35, D–60 MIRL IAP
RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 34′. Trees.
RWY 31: ODALS. PAPI(P4L)—GA 3.0° TCH 50′.
RWY 04–22: H4099X75 (ASPH) S–35, D–60 MIRL
RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 44′. Tree.
RWY 22: REIL. PAPI(P4L)—GA 3.0° TCH 44′. Tree.
AIRPORT REMARKS: Attended May–Oct, Mon–Fri 1400–0200Z‡, Nov–Apr, Mon–Fri 1400–0000Z‡. Sat–Sun, 1500–2300Z‡. Holidays 1500–2300Z‡. For attendant after hours call 320–492–6652. CAUTION, occasional parachute jumping over arpt. Check NOTAMS. Ultralight tfc on and invof arpt. Waterfowl and jackrabbits on and invof rwys. MIRL Rwy 13–31 preset on low ints, to ACTIVATE higher ints and MIRL Rwy 04–22, PAPI Rwy 04, Rwy 22, Rwy 13 and Rwy 31, REIL Rwy 04, Rwy 22, Rwy 13 and ODALS Rwy 31—CTAF.
WEATHER DATA SOURCES: ASOS 118.375 (320) 763–7174. **HIWAS** 112.8 AXN.
COMMUNICATIONS: CTAF/UNICOM 123.0
ALEXANDRIA RCO 122.6 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 126.1
RADIO AIDS TO NAVIGATION: NOTAM FILE AXN.
ALEXANDRIA (L) VORW/DME 112.8 AXN Chan 75 N45°57.50′ W95°13.96′ 224° 8.8 NM to fld. 1367/7E. **HIWAS.**
TAMIE NDB (MHW/LOM) 374 EE N45°47.50′ W95°18.33′ 316° 5.8 NM to fld.
ILS 110.5 I–EEZ Rwy 31. LOM TAMIE NDB.



ANOKA CO–BLAINE ARPT (JANES FLD) (See MINNEAPOLIS)

LOC I-EEZ	APP CRS	Rwy Idg	5100
110.5	315°	TDZE	1423
		Apt Elev	1424

ILS or LOC RWY 31

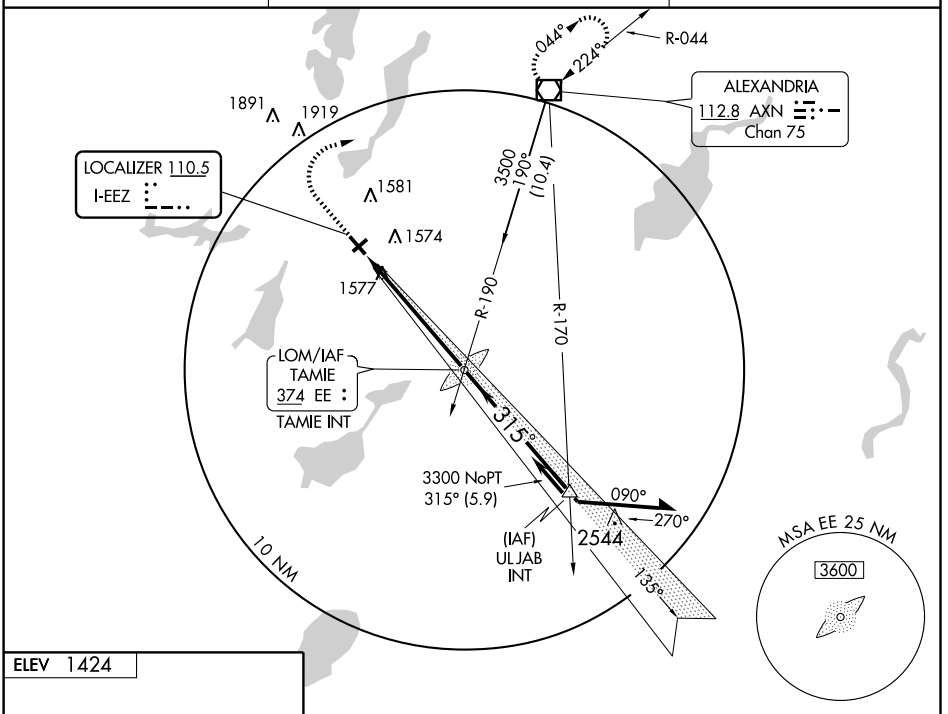
ALEXANDRIA/CHANDLER FIELD (AXN)

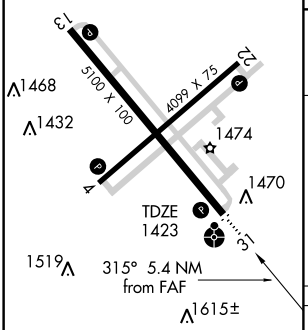
T ANA Inoperative table does not apply to S-LOC 31 Category C.

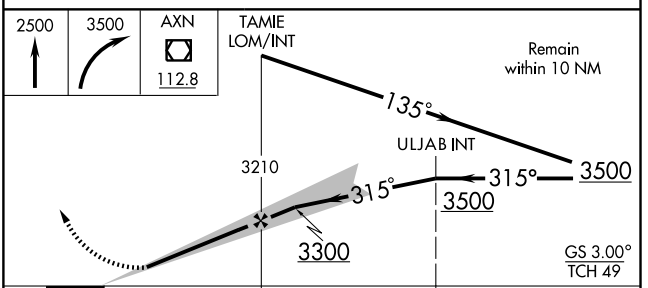
ODALS

MISSED APPROACH: Climb to 2500 then climbing right turn to 3500 direct AXN VOR/DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.375	126.1 269.2	123.0 (CTAF) L







REIL Rwys 4,13 and 22 L
MIRL Rwys 4-22 and 13-31 L

FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

CATEGORY	A	B	C	D
S-ILS 31	1623-¾ 200 (200-¾)			
S-LOC 31	1840-¾ 417 (500-¾)		1840-1¼ 417 (500-1¼)	
CIRCLING	1920-1 496 (500-1)		1920-1½ 496 (500-1½)	1980-2 556 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	4099
CH 48917	225°	TDZE	1424
W22A		Apt Elev	1425

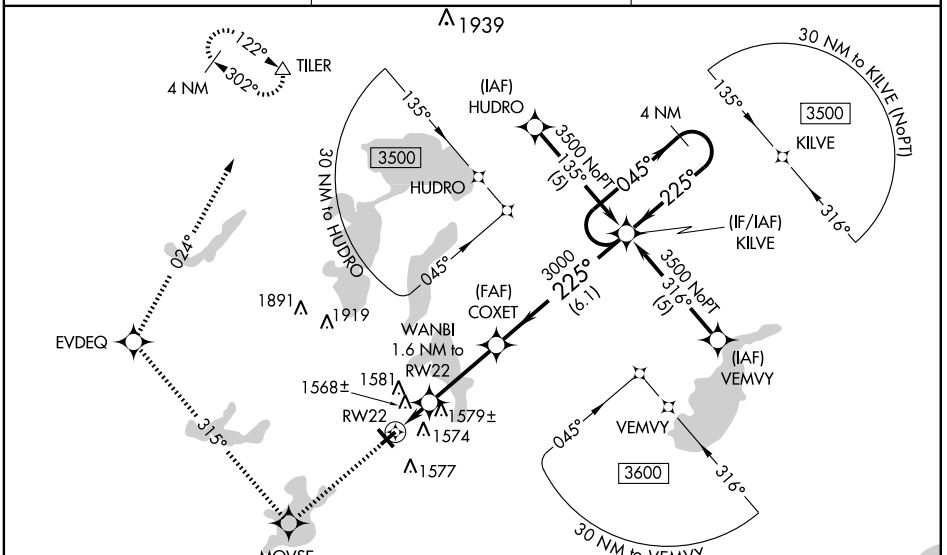
RNAV (GPS) RWY 22

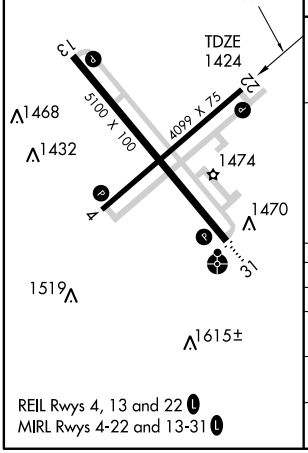
ALEXANDRIA/CHANDLER FIELD (AXN)

Baro-VNAV NA when using Glenwood altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Glenwood altimeter setting and increase all DA 37 feet and all MDA 40 feet, increase LNAV/VNAV all Cats and LNAV Cat D visibility ¼ mile.

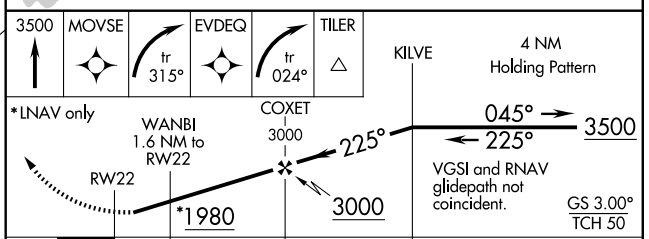
MISSED APPROACH: Climb to 3500 direct MOVSE and right turn on track 315° to EVDEQ and on track 024° to TILER and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.375	126.1 269.2	123.0 (CTAF) L





REIL Rwys 4, 13 and 22 L
MIRL Rwys 4-22 and 13-31 L



CATEGORY	A	B	C	D
LPV DA	1677-1 253 (300-1)			
LNAV/VNAV DA	1880-1½ 456 (500-1½)			
LNAV MDA	1840-1 416 (500-1)		1840-1¼ 416 (500-1¼)	
CIRCLING	1920-1 495 (500-1)		1920-1½ 495 (500-1½)	1980-2 555 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS CH 61007 W31A	APP CRS 315°	Rwy Idg 5100 TDZE 1423 Apt Elev 1424

RNAV (GPS) RWY 31

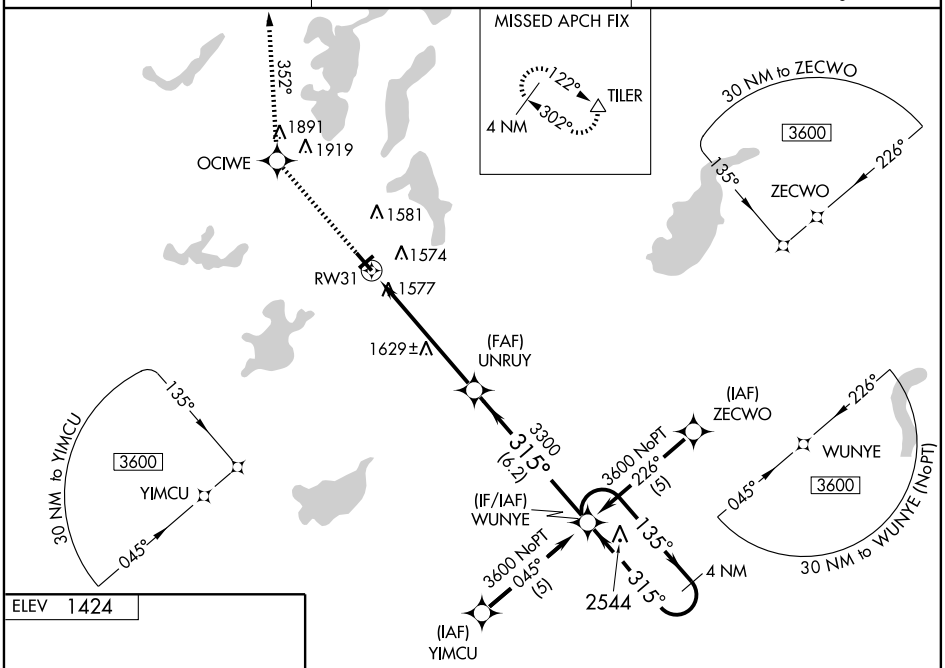
ALEXANDRIA/ CHANDLER FIELD (AXN)

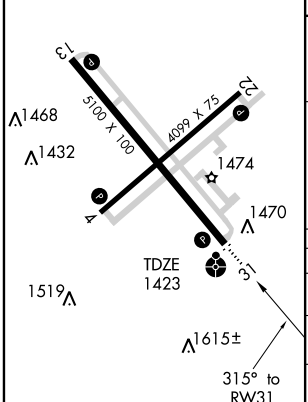
T A Inoperative table does not apply to LPV & LNAV/VNAV Cats A/B/C and LNAV Cat C. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP -0.3 NA. VDP and Baro-VNAV NA when using Glenwood altimeter setting. When local altimeter setting not received, use Glenwood altimeter setting and increase all DAs/MDAs 40 feet and increase LPV and LNAV/VNAV visibilities ¼ mile all Cats.

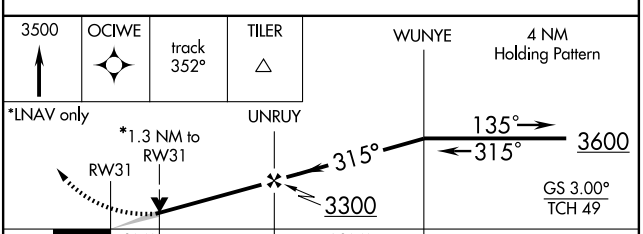
ODALS

MISSED APPROACH: Climb to 3500 direct OCIWE and via 352° track to TILER and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
118.375	126.1 269.2	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1815-1¼ 392 (400-1¼)			
LNAV/ VNAV DA	1885-1½ 462 (500-1½)			
LNAV MDA	1880-¾ 457 (500-¾)		1880-1¼ 457 (500-1¼)	1880-1½ 457 (500-1½)
CIRCLING	1920-1 496 (500-1)		1920-1½ 496 (500-1½)	1980-2 556 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

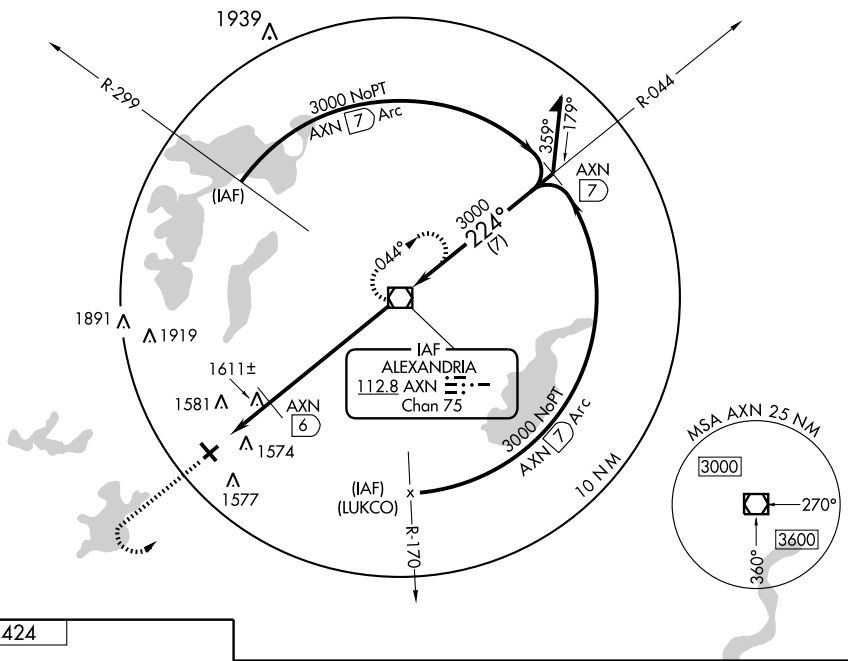
VOR/DME AXN 112.8 Chan 75	APP CRS 224°	Rwy Idg 4099 TDZE 1423 Apt Elev 1424

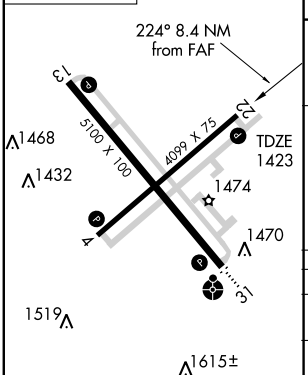
VOR RWY 22

ALEXANDRIA/CHANDLER FIELD (AXN)

MISSED APPROACH: Climb to 2500 then climbing left turn to 3000 direct to AXN VOR/DME and hold.

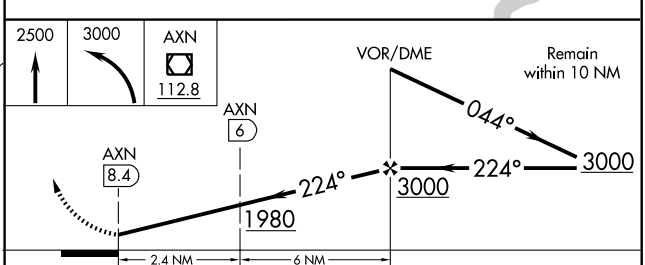
ASOS	MINNEAPOLIS CENTER	UNICOM
118.375	126.1 269.2	123.0 (CTAF) L





REIL Rwys 4, 13 and 22 L
MIRL Rwys 4-22 and 13-31 L

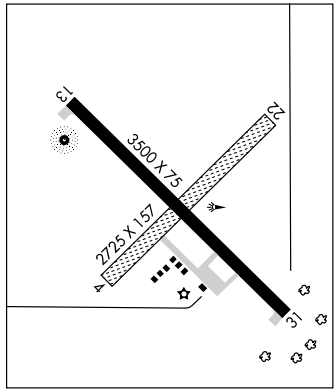
FAF to MAP 8.4 NM					
Knots	60	90	120	150	180
Min:Sec	8:24	5:36	4:12	3:22	2:48



CATEGORY	A	B	C	D
S-22	1980-1 557 (600-1)		1980-1 ½ 557 (600-1½)	1980-1¾ 557 (600-1¾)
CIRCLING	1980-1 556 (600-1)		1980-1 ½ 556 (600-1½)	1980-2 556 (600-2)
DME MINIMUMS				
S-22	1880-1 457 (500-1)		1880-1 ¼ 457 (500-1¼)	1880-1½ 457 (500-1½)
CIRCLING	1920-1 ½ 496 (500-1)		1920-1 ½ 496 (500-1½)	1980-2 556 (600-2)

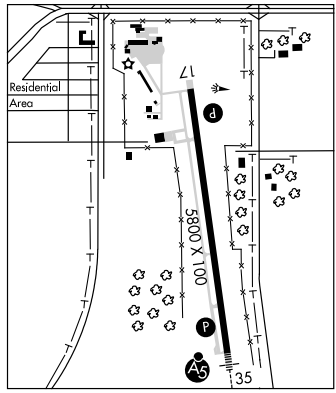
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APPLETON MUNI (AQP) 2 NE UTC−6(−5DT) N45°13.65′ W96°00.26′ **TWIN CITIES**
1020 B TPA—1820(800) NOTAM FILE AQP **L–12I, 14H**
RWY 13–31: H3500X75 (ASPH) MIRL **IAP**
RWY 31: Trees.
RWY 04–22: 2725X157 (TURF)
RWY 04: Road. **RWY 22:** Road.
AIRPORT REMARKS: Unattended. Rwy 04–22 CLOSED winter months. Ultralights on and invof arpt. Rwy 13 visual lighting on instrument rwy. Rwy 04–22 marked with yellow cones. ACTIVATE MIRL Rwy 13–31—CTAF.
WEATHER DATA SOURCES: AWOS–3 356 AQP (320) 289–1265.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE MVE.
MONTEVIDEO (T) VORW/DME 111.6 MVE Chan 53 N44°58.36′ W95°42.72′ 316° 19.7 NM to fld. 1034/5E. Unmonitored.
NDB (MHW) 356 AQP N45°13.71′ W96°00.57′ at fld. **AWOS–3.** NOTAM FILE AQP.



A.R.S. SPORT STRIP (See BELLE PLAINE)

AUSTIN MUNI (AUM) 2 E UTC−6(−5DT) N43°39.76′ W92°55.98′ **CHICAGO**
1234 B S4 **FUEL** 100LL, JET A NOTAM FILE AUM **H–5D, L–12J**
RWY 17–35: H5800X100 (CONC) S–14, D–19 HIRL **IAP**
RWY 17: REIL. PAPI(P4L)—GA 3.0° TCH 41′. Trees.
RWY 35: MALSR. PAPI(P4L)—GA 3.0° TCH 42′. P–line.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡, Sat 1400–2200Z‡, Sun 1500–2100Z‡. Migratory waterfowl and deer in vicinity of arpt. HIRL Rwy 17–35 preset low ints, to increase ints and ACTIVATE REIL Rwy 17, MALSR Rwy 35 and PAPI Rwy 17 and Rwy 35—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.025 (507) 433–6667
COMMUNICATIONS: CTAF/UNICOM 122.7
RCO 122.5 (PRINCETON RADIO)
Ⓡ **ROCHESTER APP/DEP CON** 119.8 (1100–0400Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.35 (0400–1100Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE RST.
ROCHESTER (L) VORW/DME 112.0 RST Chan 57 N43°46.97′ W92°35.82′ 239° 16.3 NM to fld. 1389/5E. **HIWAS.**
(T) VORW/DME 108.2 JAY Chan 19 N43°34.58′ W92°55.18′ 351° 5.2 NM to fld. 1232/3E. NOTAM FILE AUM.
ILS 110.55 I–AUM Rwy 35. LOC only.



BABCO N44°51.40′ W92°59.07′ NOTAM FILE STP. **TWIN CITIES**
NDB (LOM) 385 BA 322° 5.7 NM to St Paul Downtown Holman Fld.

BACKUS MUNI (7Y3) 1 NE UTC−6(−5DT) N46°49.61′ W94°30.43′ **TWIN CITIES**
1355 B **FUEL** 100LL NOTAM FILE PNM
RWY 15–33: 3588X145 (TURF) LIRL (NSTD)
RWY 15: Trees.
AIRPORT REMARKS: Attended 1400–2300Z‡. For fuel call 218–947–3211/3100. Ultralight activity on and invof arpt. Rwy 15 and Rwy 33 sand showing through turf. Rwy 15–33 marked with yellow plastic cones. Rwy 15–33 NSTD LIRL due to spacing.
COMMUNICATIONS: CTAF 122.9

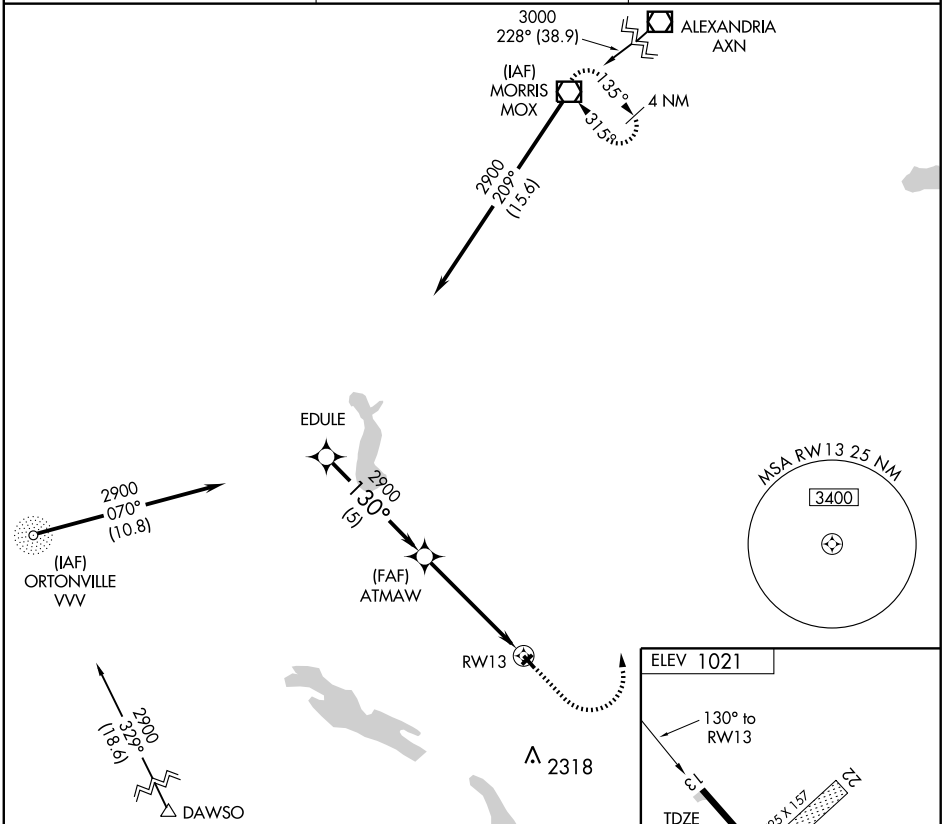
APP CRS		
130°	Rwy Idg	3500
	TDZE	1021
	Apt Elev	1021

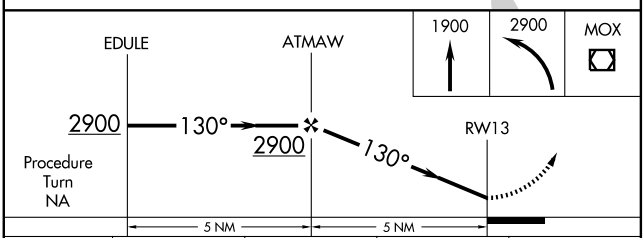
GPS RWY 13
APPLETON MUNI (AQP)

NA

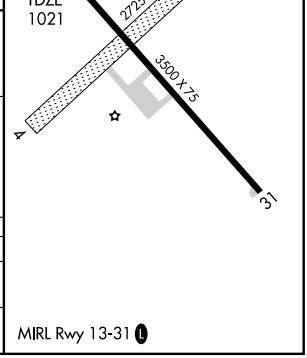
MISSED APPROACH: Climb to 1900, then climbing left turn to 2900 direct MOX VOR/DME and hold.

AWOS-3	PRINCETON RADIO	CTAF
356	122.45	122.9 L





CATEGORY	A	B	C	D
S-13	1480-1	459 (500-1)	1480-1¼ 459 (500-1¼)	NA
CIRCLING	1480-1	459 (500-1)	1480-1½ 459 (500-1½)	NA



NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

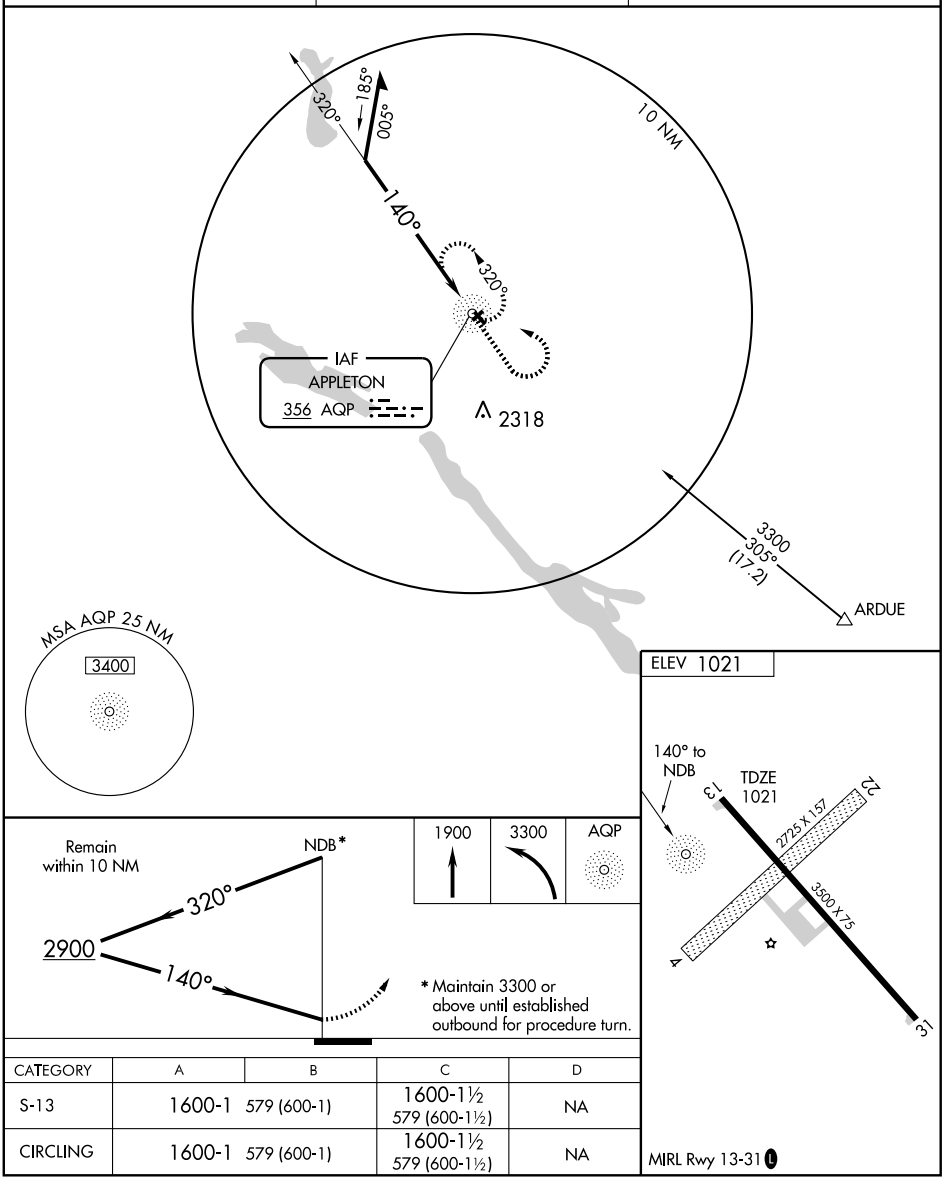
NDB AQP	APP CRS		
356	140°	Rwy Idg	3500
		TDZE	1021
		Apt Elev	1021

NDB RWY 13
APPLETON MUNI (AQP)

NA

MISSED APPROACH: Climb to 1900 then climbing left turn to 3300 direct AQP NDB and hold.

AWOS-3	PRINCETON RADIO	CTAF
356	122.45	122.9 L

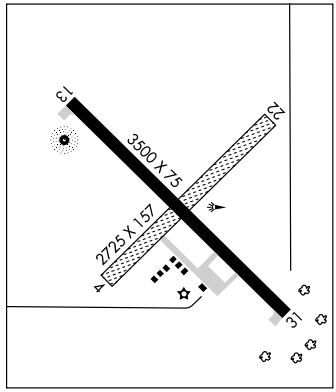


CATEGORY	A	B	C	D
S-13	1600-1	579 (600-1)	1600-1½ 579 (600-1½)	NA
CIRCLING	1600-1	579 (600-1)	1600-1½ 579 (600-1½)	NA

MIRL Rwy 13-31 L

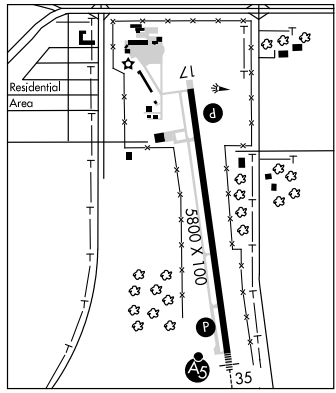
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APPLETON MUNI (AQP) 2 NE UTC−6(−5DT) N45°13.65′ W96°00.26′ **TWIN CITIES**
1020 B TPA—1820(800) NOTAM FILE AQP **L–12I, 14H**
RWY 13–31: H3500X75 (ASPH) MIRL **IAP**
RWY 31: Trees.
RWY 04–22: 2725X157 (TURF)
RWY 04: Road. **RWY 22:** Road.
AIRPORT REMARKS: Unattended. Rwy 04–22 CLOSED winter months. Ultralights on and invof arpt. Rwy 13 visual lighting on instrument rwy. Rwy 04–22 marked with yellow cones. ACTIVATE MIRL Rwy 13–31—CTAF.
WEATHER DATA SOURCES: AWOS–3 356 AQP (320) 289–1265.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE MVE.
MONTEVIDEO (T) VORW/DME 111.6 MVE Chan 53 N44°58.36′ W95°42.72′ 316° 19.7 NM to fld. 1034/5E. Unmonitored.
NDB (MHW) 356 AQP N45°13.71′ W96°00.57′ at fld. **AWOS–3.** NOTAM FILE AQP.



A.R.S. SPORT STRIP (See BELLE PLAINE)

AUSTIN MUNI (AUM) 2 E UTC−6(−5DT) N43°39.76′ W92°55.98′ **CHICAGO**
1234 B S4 **FUEL** 100LL, JET A NOTAM FILE AUM **H–5D, L–12J**
RWY 17–35: H5800X100 (CONC) S–14, D–19 HIRL **IAP**
RWY 17: REIL. PAPI(P4L)—GA 3.0° TCH 41′. Trees.
RWY 35: MALSR. PAPI(P4L)—GA 3.0° TCH 42′. P–line.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡, Sat 1400–2200Z‡, Sun 1500–2100Z‡. Migratory waterfowl and deer in vicinity of arpt. HIRL Rwy 17–35 preset low ints, to increase ints and ACTIVATE REIL Rwy 17, MALSR Rwy 35 and PAPI Rwy 17 and Rwy 35—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.025 (507) 433–6667
COMMUNICATIONS: CTAF/UNICOM 122.7
RCO 122.5 (PRINCETON RADIO)
Ⓡ **ROCHESTER APP/DEP CON** 119.8 (1100–0400Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.35 (0400–1100Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE RST.
ROCHESTER (L) VORW/DME 112.0 RST Chan 57 N43°46.97′ W92°35.82′ 239° 16.3 NM to fld. 1389/5E. **HIWAS.**
(T) VORW/DME 108.2 JAY Chan 19 N43°34.58′ W92°55.18′ 351° 5.2 NM to fld. 1232/3E. NOTAM FILE AUM.
ILS 110.55 I–AUM Rwy 35. LOC only.



BABCO N44°51.40′ W92°59.07′ NOTAM FILE STP. **TWIN CITIES**
NDB (LOM) 385 BA 322° 5.7 NM to St Paul Downtown Holman Fld.

BACKUS MUNI (7Y3) 1 NE UTC−6(−5DT) N46°49.61′ W94°30.43′ **TWIN CITIES**
1355 B **FUEL** 100LL NOTAM FILE PNM
RWY 15–33: 3588X145 (TURF) LIRL (NSTD)
RWY 15: Trees.
AIRPORT REMARKS: Attended 1400–2300Z‡. For fuel call 218–947–3211/3100. Ultralight activity on and invof arpt. Rwy 15 and Rwy 33 sand showing through turf. Rwy 15–33 marked with yellow plastic cones. Rwy 15–33 NSTD LIRL due to spacing.
COMMUNICATIONS: CTAF 122.9

LOC I-AUM	APP CRS	Rwy Idg	5800
110.55	351°	TDZE	1234
		Apt Elev	1234

ILS or LOC RWY 35
AUSTIN MUNI (AUM)

Inoperative table does not apply to S-ILS 35 when using local altimeter setting. When local altimeter setting not received, use Albert Lea altimeter setting and increase DA to 1532 feet and all MDAs 60 feet, increase S-LOC 35 Cat C/D visibility ¼ mile. Visibility reduction by helicopters NA. For inoperative MALSR, increase S-LOC 35 Cat A/B visibility to 1 mile, when using Albert Lea altimeter setting increase S-LOC 35 Cat A/B visibility to 1 mile.

NA

MALSR

MISSED APPROACH: Climb to 1800 then climbing right turn to 3800 via heading 150° and MCW VORTAC R-034 to FARUN INT and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
119.025	119.8 251.125	122.7 (CTAF) L

ROCHESTER 112.0 RST Chan 57

LOCALIZER 110.55 I-AUM

1477 1583 1649 1387

10 NM

3800 to FARUN 210° (22.9)

AUSTIN 108.2 JAY Chan 19

2321

R-103 R-116 R-223

109.8 AEL Chan 35

DACAB INT

351° (6.2) 2900

R-034

ALTERNATE MISSED APCH FIX

ROCHESTER RST 112.0 Chan 57

R-205 025° 205°

Procedure NA for arrivals at MCW VORTAC on airway radials 343 CW 075.

IAF MASON CITY 114.9 MCW Chan 96

(IF/IAF) FARUN INT

351° 171° 1 min

2828

MSA JAY 25 NM

3400 210° 030° 3800

3800 NoPT 034° (29.5) 171°

ELEV 1234 HIRL Rwy 17-35 L REIL Rwy 17 L

5800 X 100

TDZE 1234

351° 5 NM from FAF

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

1800	3800 150°	MCW R-034	FARUN INT

VGSI and ILS glidepath not coincident.

FARUN INT — One Minute Holding Pattern

DACAB INT 2900 351° 171° 351° 3800 2900

GS 3.00° TCH 48

5 NM 6.2 NM

CATEGORY	A	B	C	D
S-ILS 35	1484-¾ 250 (300-¾)			
S-LOC 35	1700-¾ 466 (500-¾)			1700-1 466 (500-1)
CIRCLING	1740-1 506 (600-1)		1740-1½ 506 (600-1½)	1800-2 566 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	5800
169°	TDZE	1231
	Apt Elev	1234

RNAV (GPS) RWY 17

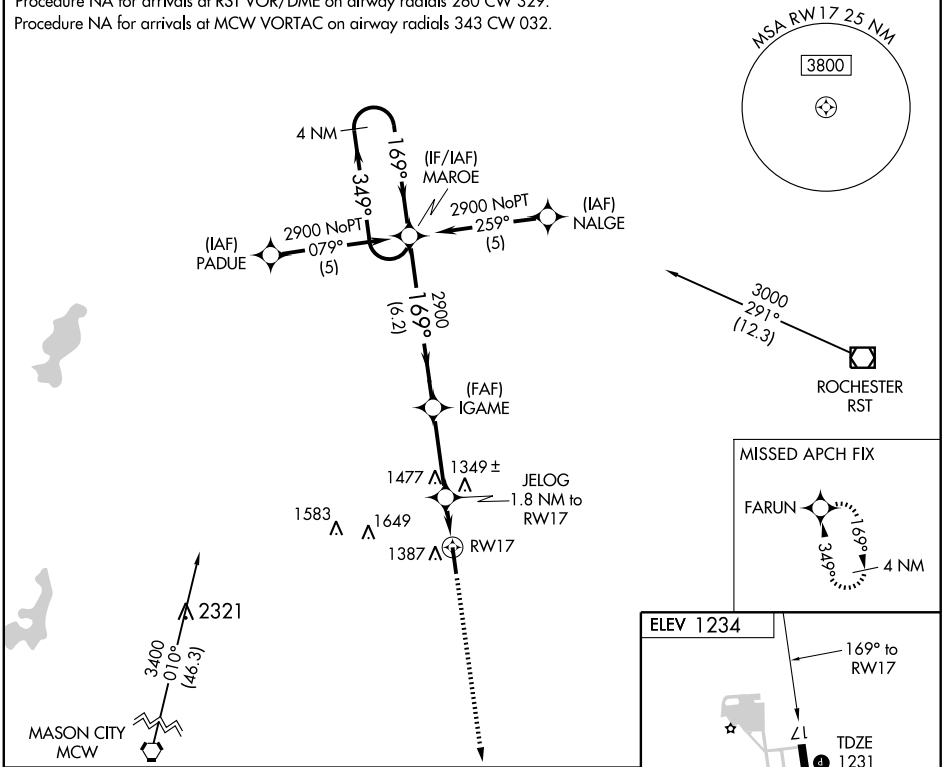
AUSTIN MUNI (AUM)

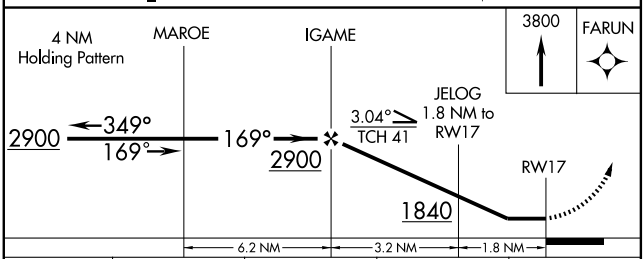
DME/DME RNP -0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Albert Lea altimeter setting and increase all MDAs 60 feet, and LNAV Cat C/D visibility ¼ mile.

MISSED APPROACH: Climb to 3800 direct FARUN and hold.

AWOS-3	ROCHESTER APP CON★	UNICOM
119.025	119.8 251.125	122.7 (CTAF) L

Procedure NA for arrivals at RST VOR/DME on airway radials 260 CW 329.
Procedure NA for arrivals at MCW VORTAC on airway radials 343 CW 032.





CATEGORY	A	B	C	D
LNAV MDA	1700-1	469 (500-1)	1700-1¼ 469 (500-1¼)	1700-1½ 469 (500-1½)
CIRCLING	1740-1	506 (600-1)	1740-1½ 506 (600-1½)	1800-2 566 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	5800
CH 99506	349°	TDZE	1234
W35A		Apt Elev	1234

RNAV (GPS) RWY 35

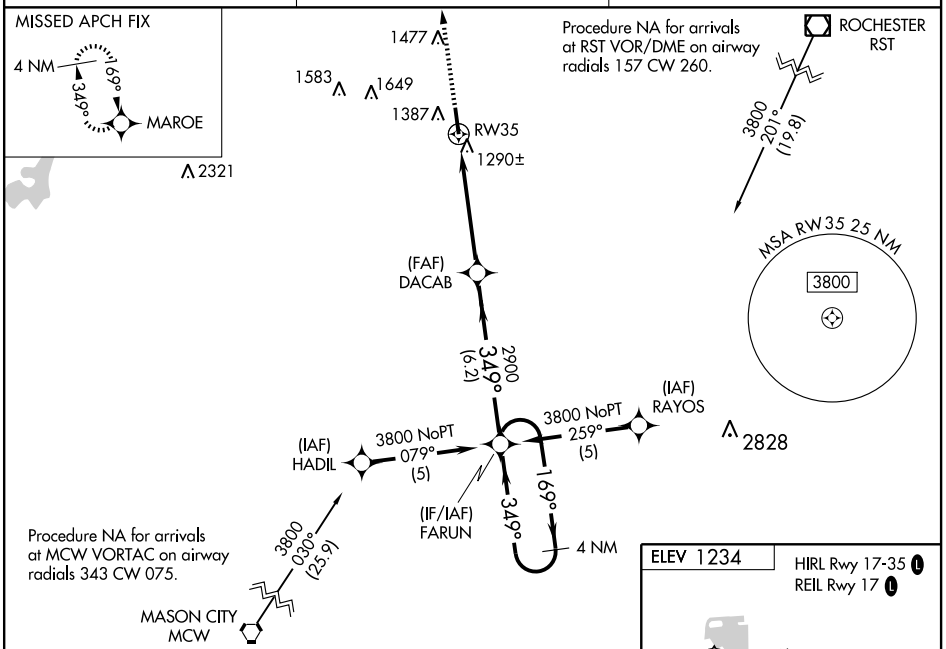
AUSTIN MUNI (AUM)

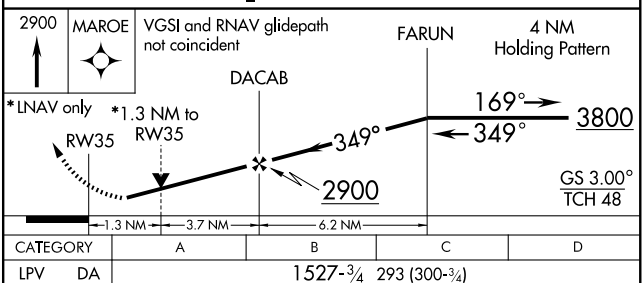
T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (115°F).
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.
Baro-VNAV and VDP NA when using Albert Lea altimeter setting. When local altimeter setting not received, use Albert Lea altimeter setting and increase all DAs 48 feet and all MDAs 60 feet, increase LNAV/VNAV visibility ¼ mile all Cats, and LNAV Cat C/D visibility ¼ mile.
For inoperative MALSR, when using Albert Lea altimeter setting, increase LPV visibility to 1¼ mile all Cats.

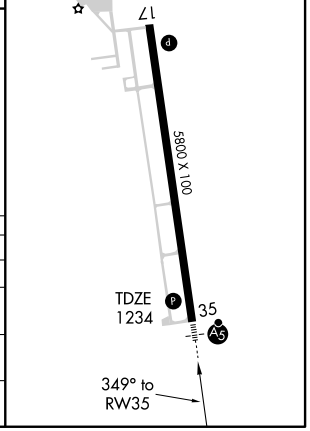
MALSR

MISSED APPROACH: Climb to 2900 direct MAROE and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
119.025	119.8 251.125	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1527-¾ 293 (300-¾)			
LNAV/VNAV DA	1578-¾ 344 (400-¾)			
LNAV MDA	1700-¾ 466 (500-¾)			1700-1 466 (500-1)
CIRCLING	1740-1 506 (600-1)		1740-1½ 506 (600-1½)	1800-2 566 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

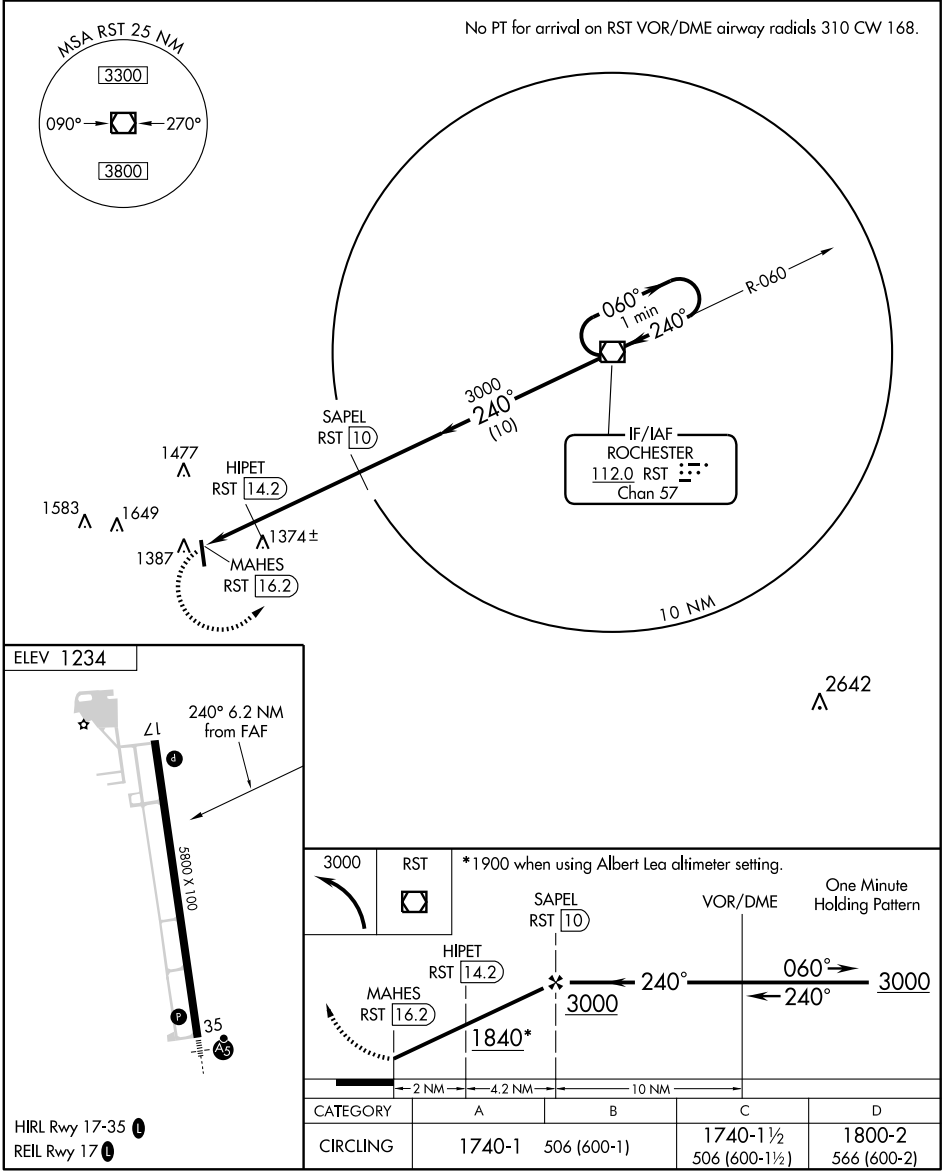
VOR/DME RST	APP CRS	Rwy Idg	N/A
112.0	240°	TDZE	N/A
Chan 57		Apt Elev	1234

VOR/DME-A
AUSTIN MUNI (AUM)

When local altimeter setting not received, use Albert Lea altimeter setting and increase all MDAs 60 feet.

MISSED APPROACH: Climbing left turn to 3000 direct RST VOR/DME and hold.

AWOS-3	ROCHESTER APP CON*	UNICOM
119.025	119.8 251.125	122.7 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	1740-1	506 (600-1)	1740-1½ 506 (600-1½)	1800-2 566 (600-2)

HIRL Rwy 17-35 L
REIL Rwy 17 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

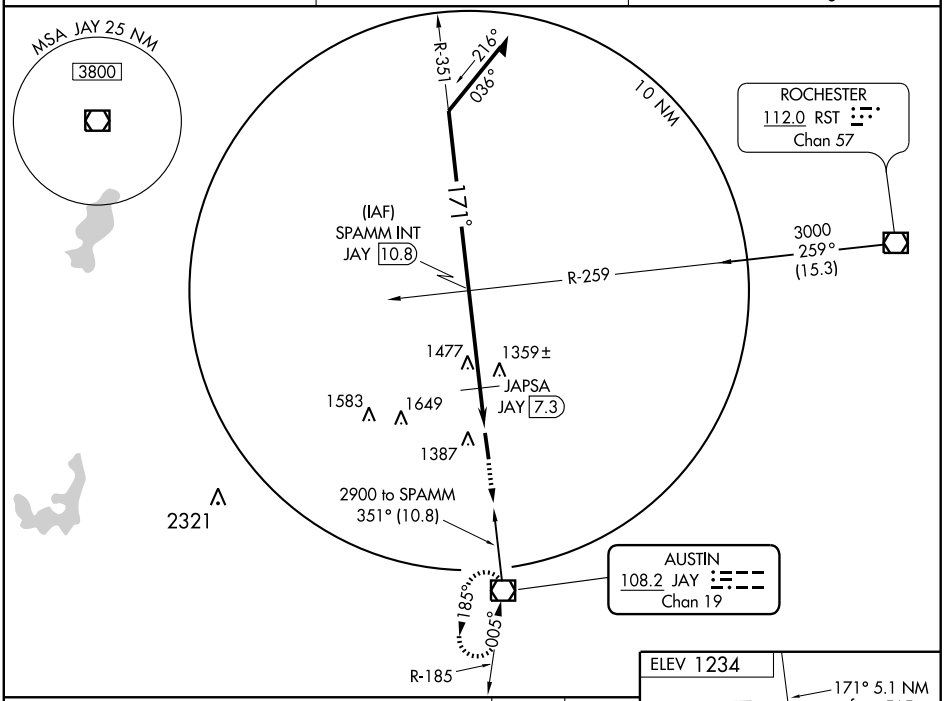
VOR/DME JAY	APP CRS	Rwy Idg	5800
108.2	171°	TDZE	1231
Chan 19		Apt Elev	1234

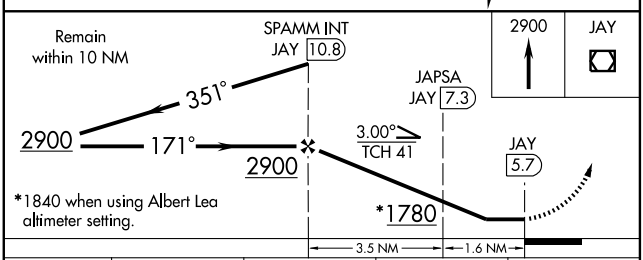
VOR RWY 17
AUSTIN MUNI (AUM)

Visibility reduction by helicopters NA.
When local altimeter setting not received, use Albert Lea altimeter setting and increase all MDAs 60 feet, and S-17 Cat. C/D and circling Cat. C visibility ¼ mile. Increase JAPSA FIX MINIMUMS S-17 Cat. C/D visibility ¼ mile.

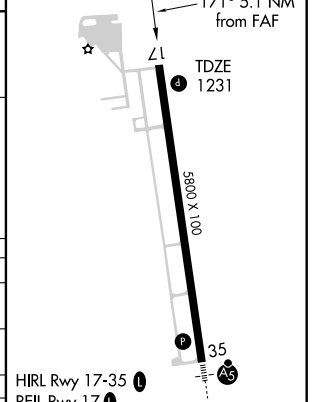
MISSED APPROACH: Climb to 2900 direct JAY VOR/DME and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
119.025	119.8 251.125	122.7 (CTAF) L





CATEGORY	A	B	C	D
S-17	1780-1 549 (600-1)		1780-1½ 549 (600-1½)	1780-1¾ 549 (600-1¾)
CIRCLING	1780-1 546 (600-1)		1780-1½ 546 (600-1½)	1800-2 566 (600-2)
JAPSA FIX MINIMUMS				
S-17	1620-1 389 (400-1)			1620-1¼ 389 (400-1¼)
CIRCLING	1740-1 506 (600-1)		1740-1½ 506 (600-1½)	1800-2 566 (600-2)



FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME JAY	APP CRS	Rwy Idg	5800
108.2	351°	TDZE	1234
Chan 19		Apt Elev	1234

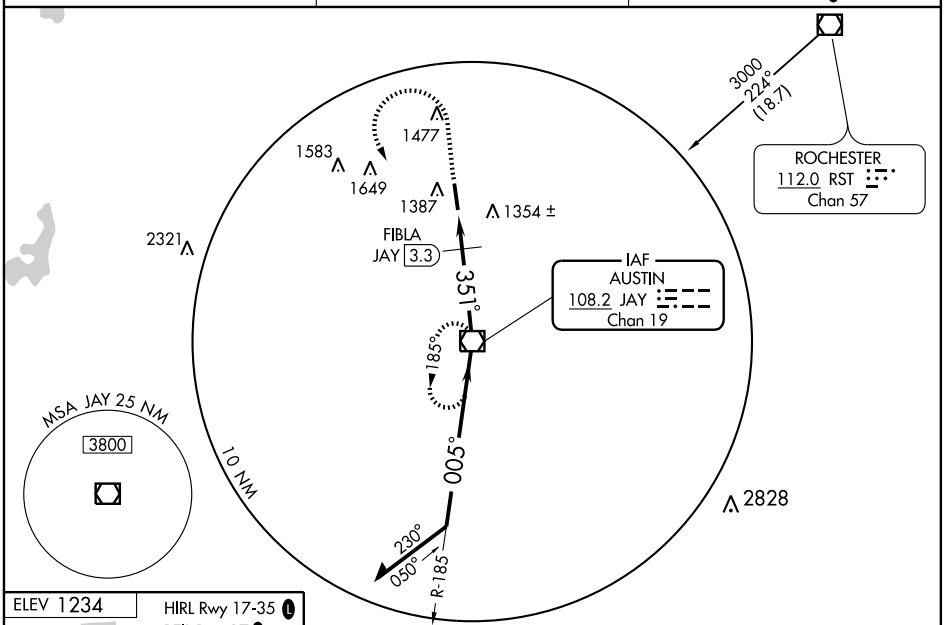
VOR RWY 35
AUSTIN MUNI (AUM)

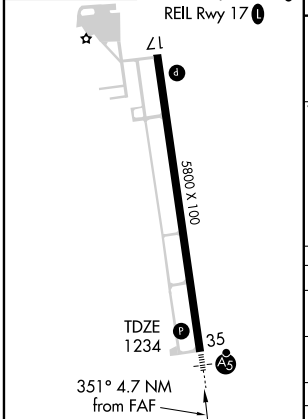
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Albert Lea altimeter setting and increase all MDAs 60 feet, and S-35 Cats C/D visibility ¼ mile.
For inoperative MALSR, increase S-35 Cats A/B visibility to 1 mile and FIBLA FIX MINIMUMS S-35 Cats A/B/C visibility to 1 mile and Cat D to 1¼ mile, when using Albert Lea altimeter setting increase S-35 Cats A/B and FIBLA FIX MINIMUMS S-35 Cats A/B visibility to 1 mile.

MALSR

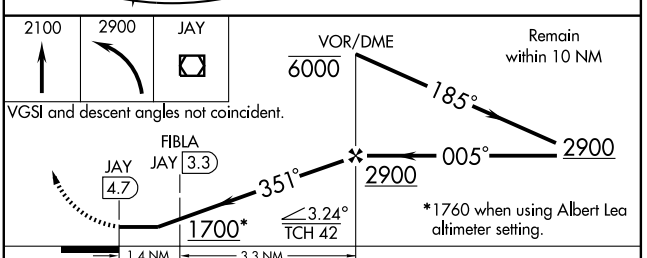
MISSED APPROACH: Climb to 2100 then climbing left turn to 2900 direct JAY VOR/DME and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
119.025	119.8 251.125	122.7 (CTAF) L





FAF to MAP 4.7 NM					
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

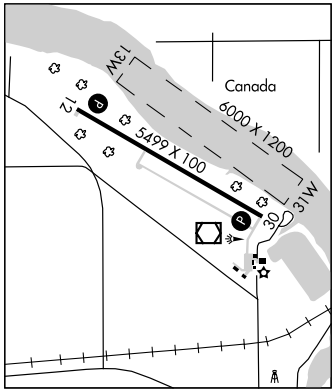


CATEGORY	A	B	C	D
S-35	1700- ¾ 466 (500-¾)			1700-1 466 (500-1)
CIRCLING	1740-1 506 (600-1)		1740-1½ 506 (600-1½)	1800-2 566 (600-2)
	FIBLA FIX MINIMUMS			
S-35	1620- ¾ 386 (400-¾)			1620-1 386 (400-1)
CIRCLING	1740-1 506 (600-1)		1740-1½ 506 (600-1½)	1800-2 566 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

BAGLEY MUNI (7Y4) 1 E UTC−6(−5DT) N47°31.50′ W95°21.65′ **TWIN CITIES**
1500 B NOTAM FILE PNM **L–14H**
RWY 14–32: H3800X75 (ASPH) MIRL
RWY 14: REIL. PAPI(P4L). Trees. **RWY 32:** REIL. PAPI(P4L). Trees.
AIRPORT REMARKS: Unattended. Rwy 14–32 1–2′ dropoff at edge of pavement. Rwy 14–32 bare spots and plow damage on rwy. Rwy 14–32 preset low ints, chg ints and ACTIVATE REIL Rwy 14 and Rwy 32 and PAPI Rwy 14 and Rwy 32—CTAF.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE BJI.
BEMIDJI (L) VORTACW 108.6 BJI Chan 23 N47°34.55′ W95°01.49′ 254° 14 NM to fld. 1410/4E.
HIWAS.

BAUDETTE INTL (BDE) 1 N UTC−6(−5DT) N48°43.71′ W94°36.73′ **TWIN CITIES**
1086 B S4 **FUEL** 100LL, JET A AOE NOTAM FILE BDE **H–2J, L–14H**
RWY 12–30: H5499X100 (ASPH) S–30 MIRL **IAP**
RWY 12: REIL. PAPI(P4L)—GA 3.0° TCH 47′. Tree.
RWY 30: REIL. PAPI(P4L)—GA 3.0° TCH 47′. Trees.
AIRPORT REMARKS: Attended Apr–Oct 1400–2300Z‡, Nov–Mar Mon–Fri 1400–2300Z‡. For arpt attendant other times call 707–317–0232. Ultralights on and invof arpt. CAUTION: Gulls and other birds on and invof arpt. Twy parallel to Rwy 12–30 is clsd winter months. ACTIVATE MIRL Rwy 12–30, REIL Rwy 12 and Rwy 30 and PAPI Rwy 12 and Rwy 30—CTAF. Flight Notification Service (ADCUS) available.
WEATHER DATA SOURCES: ASOS 126.775 (218) 634–3080.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.1 (PRINCETON RADIO)
RADIO AIDS TO NAVIGATION: NOTAM FILE BDE.
(L) VORW/DME 111.6 BDE Chan 53 N48°43.37′ W94°36.44′ at fld. 1081/4E.
VOR unusable: 100°–265° byd 35 NM blo 3500′.
DME unusable: 295°–310° byd 35 NM blo 3500′.
ILS 108.3 I–BDE Rwy 30. Class IT.



• • • • • • • • • • • • • • • • • •
1062
WATERWAY 13–31: 6000X1200 (WATER)

BELLE PLAINE

A.R.S. SPORT STRIP (7Y7) 3 N UTC−6(−5DT) N44°40.00′ W93°47.01′ **TWIN CITIES**
955 S4 NOTAM FILE PNM
RWY 18–36: 2505X110 (TURF)
RWY 36: Thld dsplcd 210′.
AIRPORT REMARKS: Unattended. For svcs call 952–873–6659. Ultralight activity on and invof arpt. Rwy 18 and Rwy 36 thlds and edges marked with yellow cones.
COMMUNICATIONS: CTAF 122.9

LOC BDE	APP CRS	Rwy Idg	5499
108.3	299°	TDZE	1085
		Apt Elev	1086

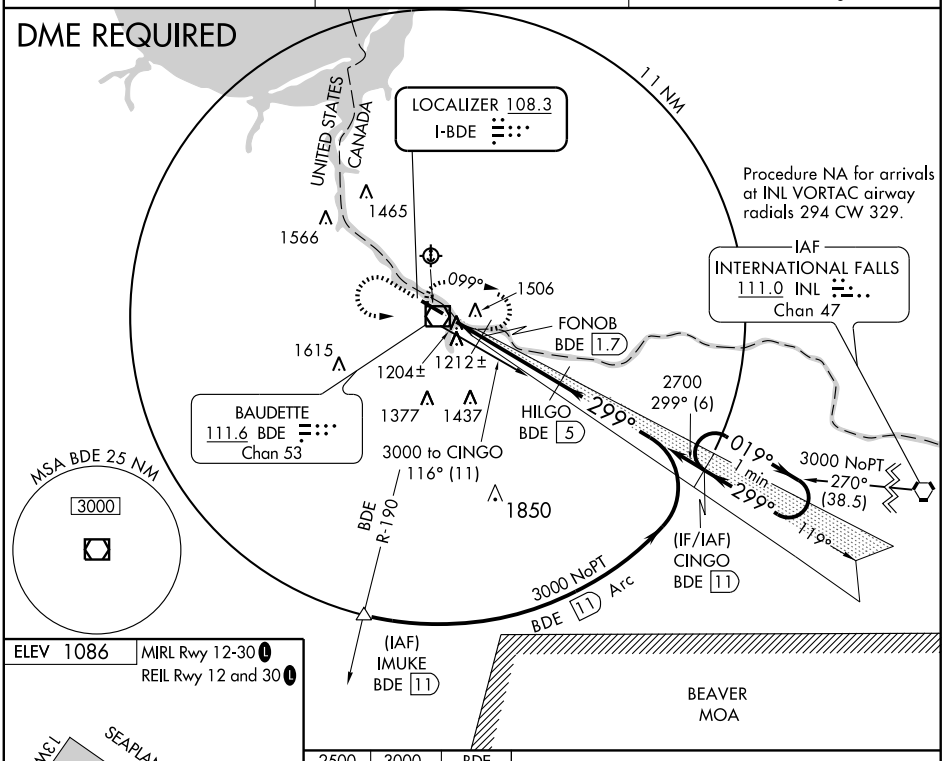
ILS or LOC/DME RWY 30

BAUDETTE INTL (BDE)

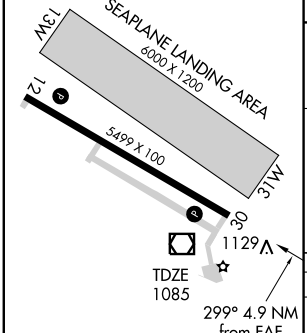
T NA Visibility reduction by helicopters NA. When local altimeter setting not received, use Warroad altimeter setting and increase all DA 75 feet and all MDA 80 feet, increase S-ILS 30 all Cats visibility ½ mile, S-LOC 30 and Circling Cat C/D visibility ¼ mile. DME from BDE VOR/DME. Simultaneous reception of I-BDE and BDE DME required.

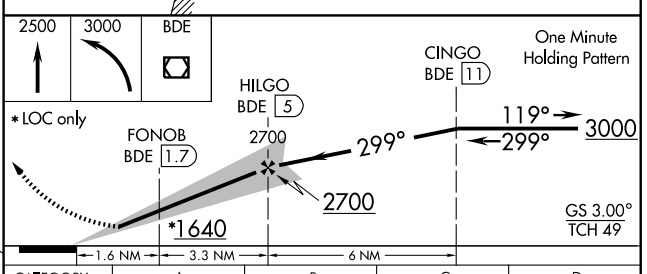
MISSED APPROACH: Climb to 2500 then climbing left turn to 3000 direct BDE VOR/DME and hold.

ASOS	PRINCETON RADIO	UNICOM
126.775	122.4	122.8 (CTAF) L



ELEV 1086 MIRL Rwy 12-30 L REIL Rwy 12 and 30 L





FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

CATEGORY	A	B	C	D
S-ILS 30	1335-¾ 250 (300-¾)			
S-LOC 30	1440-1 355 (400-1)			1440-1¼ 355 (400-1¼)
CIRCLING	1860-1 774 (800-1)	1860-1¼ 774 (800-1¼)	1860-2¼ 774 (800-2¼)	1860-2½ 774 (800-2½)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	5499
117°	TDZE	1086
	Apt Elev	1086

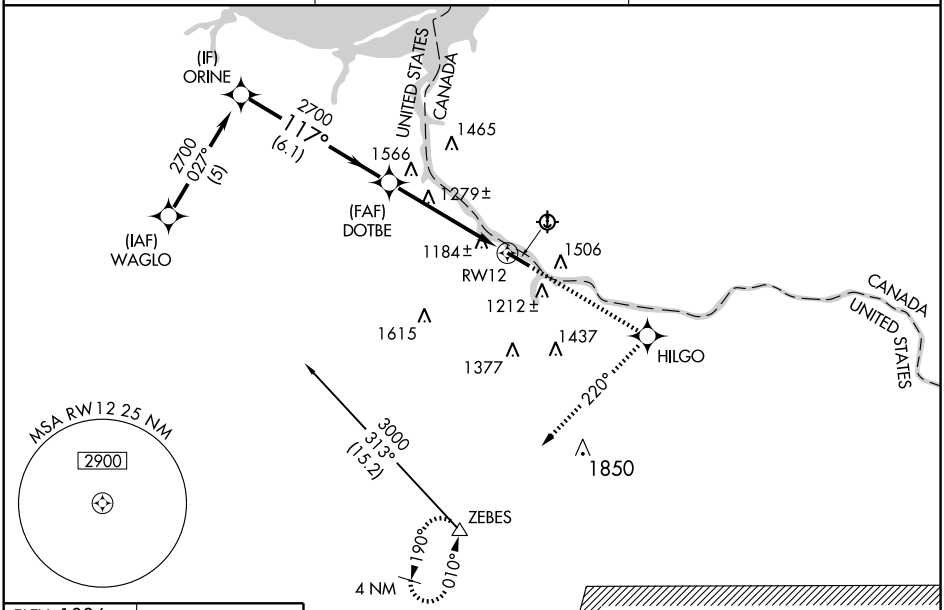
RNAV (GPS) RWY 12

BAUDETTE INTL (BDE)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Baro-VNAV NA when using Warroad altimeter setting. VDP NA with Warroad altimeter setting. When local altimeter setting not received, use Warroad altimeter setting and increase all DA 75 feet and all MDA 80 feet, increase LNAV/VNAV all Cats, LNAV and Circling Cats C and D visibility ¼ mile.

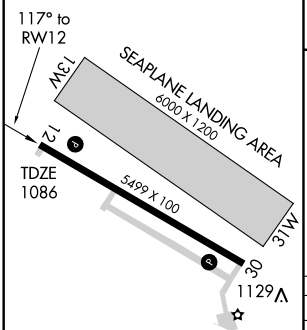
MISSED APPROACH: Climb to 3000 direct HILGO and right turn on track 220° to ZEBES and hold.

ASOS	PRINCETON RADIO	UNICOM
126.775	122.4	122.8 (CTAF) L

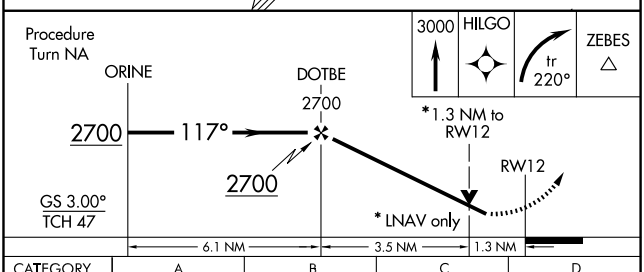


Procedure NA for arrivals at ZEBES via V82 Southbound.

BEAVER MOA



MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L



CATEGORY	A	B	C	D
LNAV/VNAV DA	1481-1½ 395 (400-1½)			
LNAV MDA	1560-1 474 (500-1)		1560-1¼ 474 (500-1¼)	1560-1½ 474 (500-1½)
CIRCLING	1860-1 774 (800-1)	1860-1¼ 774 (800-1¼)	1860-2¼ 774 (800-2¼)	1860-2½ 774 (800-2½)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	5499
CH 81814	297°	TDZE	1085
W30A		Apt Elev	1086

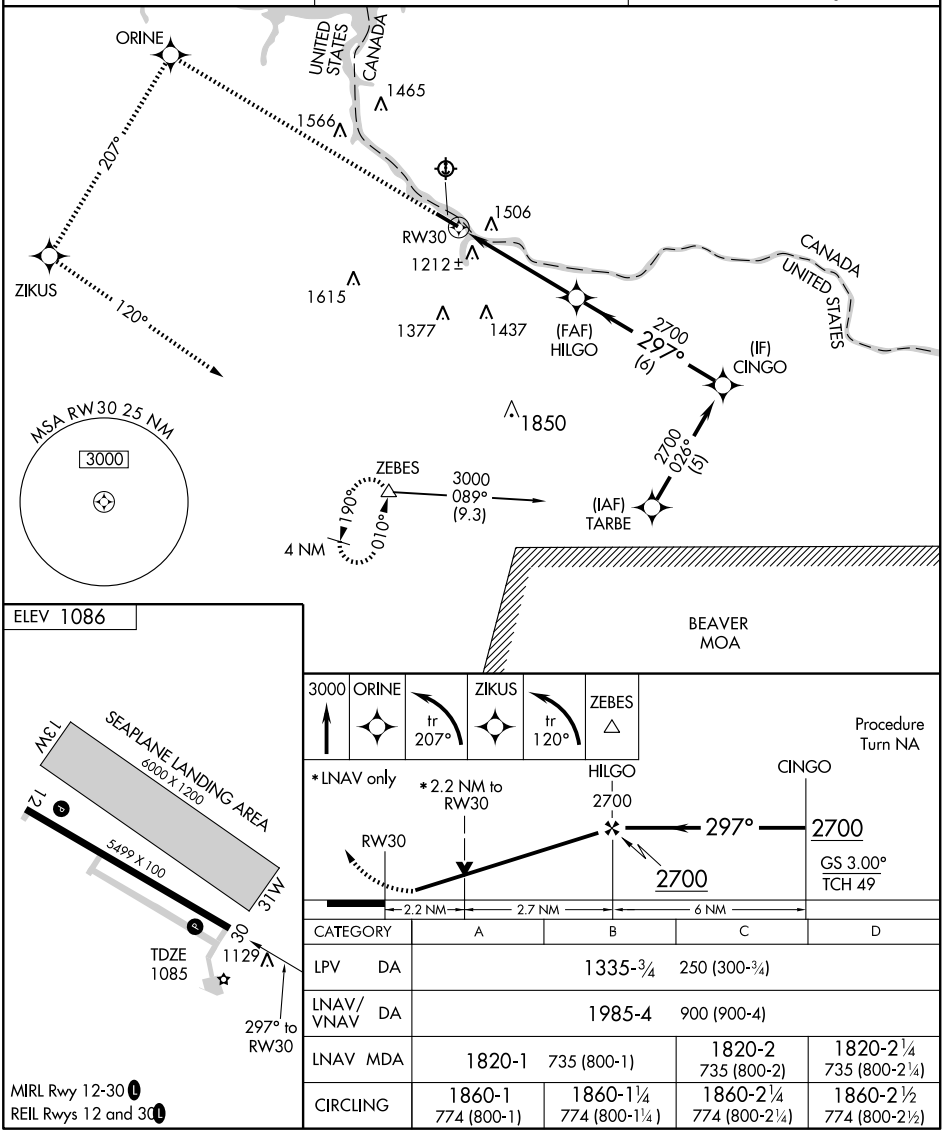
RNAV (GPS) RWY 30

BAUDETTE INTL (BDE)

Baro-VNAV NA when using Warroad altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. VDP NA with Warroad altimeter setting. When local altimeter setting not received, use Warroad altimeter setting and increase all DA 75 feet and all MDA 80 feet, increase LPV all Cats and LNAV Cat C/D visibility ½ mile, increase LNAV Cat B and Circling Cat C and D visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct ORINE and left turn on track 207° to ZIKUS and on track 120° to ZEBES and hold.

ASOS	PRINCETON RADIO	UNICOM
126.775	122.4	122.8 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1335-¾	250 (300-¾)		
LNAV/VNAV DA	1985-4	900 (900-4)		
LNAV MDA	1820-1	735 (800-1)	1820-2 735 (800-2)	1820-2¼ 735 (800-2¼)
CIRCLING	1860-1 774 (800-1)	1860-1¼ 774 (800-1¼)	1860-2¼ 774 (800-2¼)	1860-2½ 774 (800-2½)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

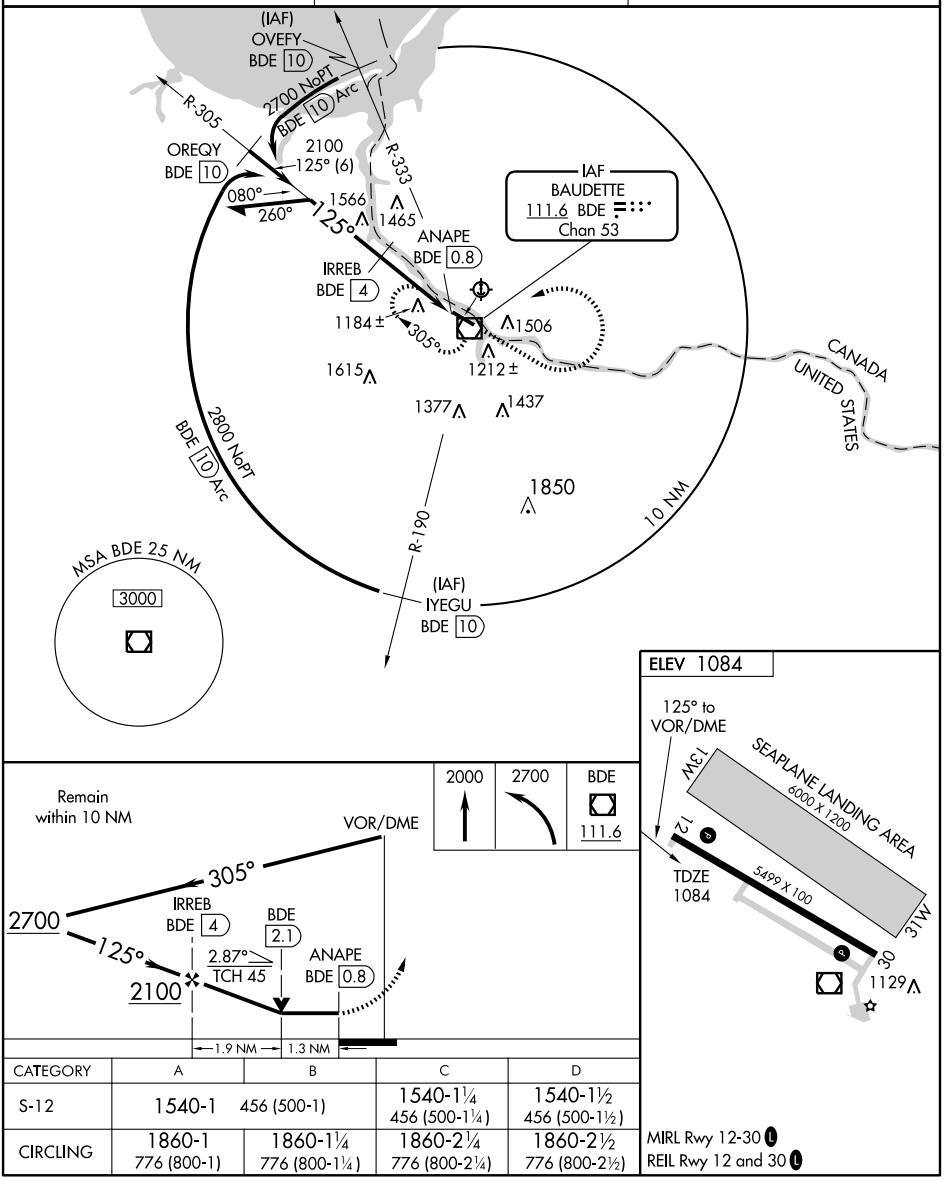
VOR/DME BDE	APP CRS	Rwy Idg	5499
111.6	125°	TDZE	1084
Chan 53		Apt Elev	1084

VOR/DME RWY 12

BAUDETTE INTL (BDE)

MISSED APPROACH: Climb to 2000 then climbing left turn to 2700 direct BDE VOR/DME and hold.

ASOS	PRINCETON RADIO	UNICOM
126.775	122.4	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-12	1540-1	456 (500-1)	1540-1¼ 456 (500-1¼)	1540-1½ 456 (500-1½)
CIRCLING	1860-1 776 (800-1)	1860-1¼ 776 (800-1¼)	1860-2¼ 776 (800-2¼)	1860-2½ 776 (800-2½)

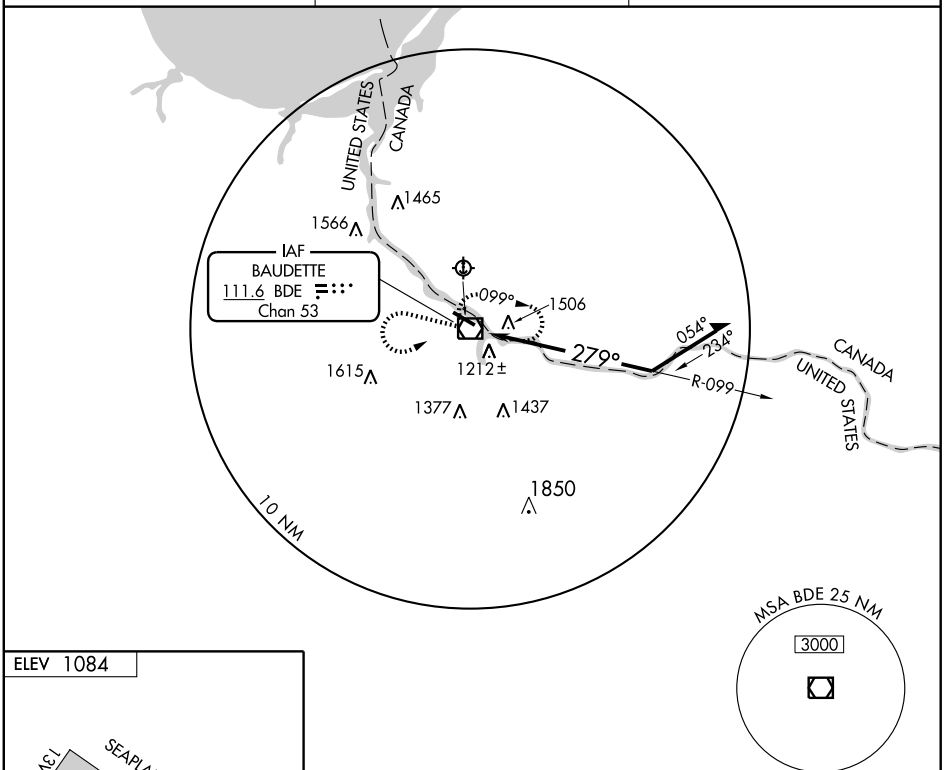
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

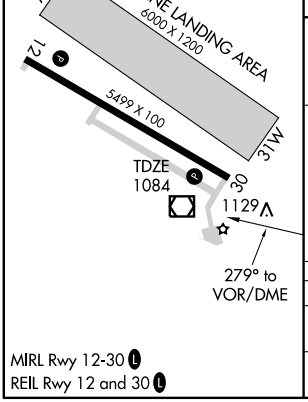
VOR/DME BDE	APP CRS	Rwy Idg	5499
111.6	279°	TDZE	1084
Chan 53		Apt Elev	1084

VOR RWY 30
BAUDETTE INTL (BDE)

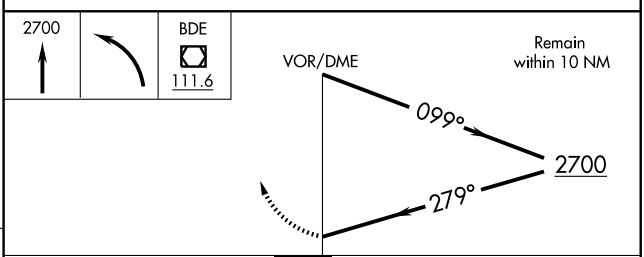
MISSED APPROACH: Climb to 2700 then left turn direct BDE VOR/DME and hold.

ASOS	PRINCETON RADIO	UNICOM
126.775	122.4	122.8 (CTAF) L





MIRL Rwy 12-30 L
REIL Rwy 12 and 30 L



CATEGORY	A	B	C	D
S-30	1860-1 776 (800-1)	1860-1¼ 776 (800-1¼)	1860-2¼ 776 (800-2¼)	1860-2½ 776 (800-2½)
CIRCLING	1860-1 776 (800-1)	1860-1¼ 776 (800-1¼)	1860-2¼ 776 (800-2¼)	1860-2½ 776 (800-2½)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

BEMIDJI

BEMIDJI RGNL (BJI) 3 NW UTC−6(−5DT) N47°30.64′ W94°56.08′

TWIN CITIES
H–2J, L–14H
IAP

1391 B S4 **FUEL** 100LL, JET A OX 3,4 Class I, ARFF Index A NOTAM FILE BJI

RWY 13–31: H7002X150 (ASPH–GRVD) S–75, D–200 HIRL

RWY 13: MALSR. PAPI(P4L)—GA 3.0° TCH 45′.

RWY 31: REIL. MALSR. PAPI(P4L)—GA 3.0° TCH 45′.

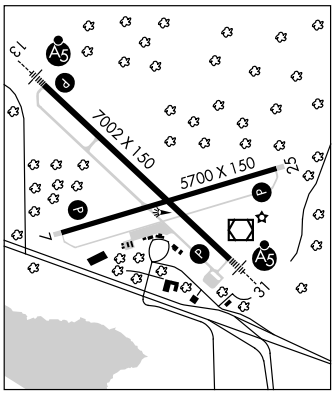
RWY 07–25: H5700X150 (ASPH–GRVD) S–75, D–200 MIRL

RWY 07: REIL. PAPI(P4L)—GA 3.0° TCH 43′. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 47′.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 07:	TORA–5700	TODA–5700	ASDA–5700	LDA–5700
RWY 13:	TORA–7002	TODA–7002	ASDA–7002	LDA–7002
RWY 25:	TORA–5700	TODA–5700	ASDA–5700	LDA–5700
RWY 31:	TORA–7002	TODA–7002	ASDA–7002	LDA–7002



AIRPORT REMARKS: Attended Mon–Fri 1200–0300Z‡, Sat–Sun 1400–0200Z‡ in summer and Sat–Sun 1400–0000Z‡ in winter. Deer and birds on and invof arpt. Snow removal crews will be monitoring CTAF during all air carrier operations for airfield condition information. ARFF crews will be monitoring CTAF during all air carrier operations. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats, call arpt manager 218–444–2438. Air carrier ops involving acft with more than 30 passengers are not authorized in excess of 15 minutes before or after scheduled arrival/departure times without prior coordination with arpt manager and confirmation that ARFF is avbl prior to landing or takeoff. HIRL Rwy 13–31 preset on low ints, to increase ints and ACTIVATE MIRL Rwy 07–25; REIL Rwy 07, Rwy 31 and Rwy 25 and PAPI Rwy 07, Rwy 25, Rwy 13 and Rwy 31, MALSR Rwy 13 and Rwy 31—CTAF.

WEATHER DATA SOURCES: AWOS–3 119.275 (218) 759–2501. **HIWAS** 108.6 BJI.

COMMUNICATIONS: CTAF/UNICOM 122.8

RCO 123.6 (PRINCETON RADIO)

MINNEAPOLIS CENTER APP/DEP CON 134.75

AIRSPACE: CLASS E svc Mon–Sat 1045–0545Z‡, Sun 1400–0545Z‡ other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE BJI.

(L) VORTACW 108.6 BJI Chan 23 N47°34.55′ W95°01.49′ 133° 5.4 NM to fld. 1410/4E. **HIWAS.** VOR portion OTS indef. VOR portion unusable 011°–050° blo 6000′. DME unusable byd 30 NM blo 3500′.

LAKE BEMIDJI (T) VOR/DME 110.0 IDJ Chan 37 N47°30.47′ W94°55.40′ at fld. 1384/4E. Associated with AWOS–3 (BJI).

BUNAN NDB (LOM) 371 MD N47°26.70′ W94°50.10′ 310° 5.7 NM to fld. Unmonitored.

ILS 111.9 I–MDI Rwy 31 LOM BUNAN NDB. LOM unmonitored.

ILS/DME 109.35 I–BJI Chan 030(Y) Rwy 25. Class IA.

BENSON MUNI (BBB) 2 W UTC−6(−5DT) N45°19.92′ W95°39.04′

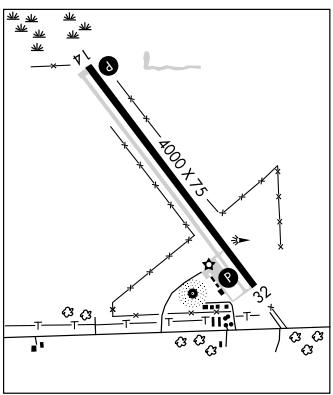
TWIN CITIES
L–14H
IAP

1039 B S2 **FUEL** 100LL NOTAM FILE BBB

RWY 14–32: H4000X75 (ASPH) S–40, D–50 MIRL

RWY 14: REIL. PAPI(P4L)—GA 3.0° TCH 40′. Trees. Rgt tfc.

RWY 32: REIL. PAPI (P4L)–GA 3.0° TCH 41′. Trees.



AIRPORT REMARKS: Unattended. Self svc fuel avbl 24 hrs with credit card. Ultralight acft on and invof the arpt. Category C and D acft ops prohibited. Rwy 14 PAPI unusable byd 2 NM. ACTIVATE PAPI Rwy 14 and Rwy 32, REIL Rwy 14 and Rwy 32 and MIRL Rwy 14–32—CTAF.

WEATHER DATA SOURCES: AWOS–3 239 BBB (320) 843–3242.

COMMUNICATIONS: CTAF/UNICOM 122.8

MINNEAPOLIS CENTER APP/DEP CON 125.5

RADIO AIDS TO NAVIGATION: NOTAM FILE MOX.

MORRIS (T) VORW/DME 109.6 MOX Chan 33 N45°33.95′ W95°58.15′ 131° 19.4 NM to fld. 1132/5E. Unmonitored.

NDB (MHW) 239 BBB N45°19.63′ W95°39.06′ at fld. **AWOS–3**. NOTAM FILE BBB. Unmonitored.

ILS or LOC/DME RWY 25

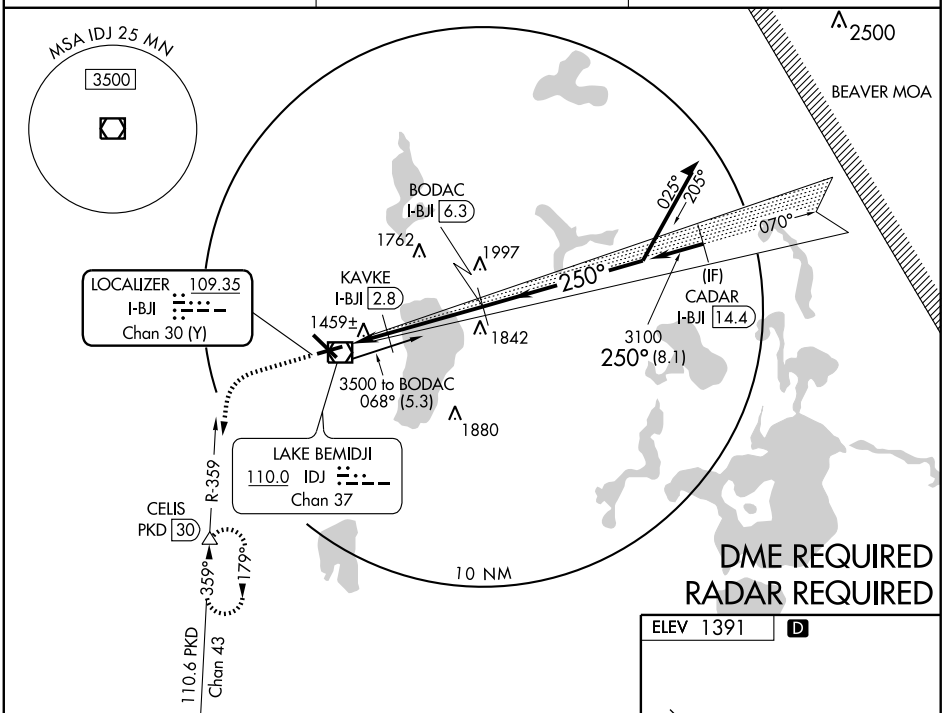
BEMIDJI RGNL (BJI)

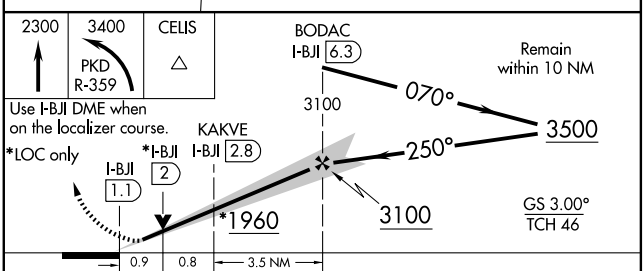
LOC/DME I-BJI	APP CRS	Rwy ldg	5700
109.35	250°	TDZE	1389
Chan 30 (Y)		Apt Elev	1391

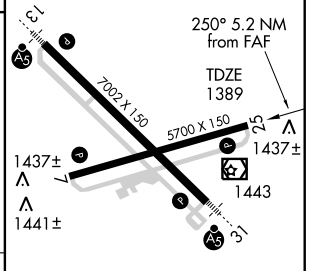
T A NA Visibility reduction by helicopters NA. When local altimeter setting not received, use Park Rapids altimeter setting and increase DA 93 feet and all MDA 100 feet, increase S-ILS 25 all Cats visibility and S-LOC 25 Cat C visibility ¼ mile, S-LOC 25 Cat D visibility ½ mile. VDP NA with Park Rapids altimeter setting.

MISSED APPROACH: Climb to 2300 then climbing left turn to 3400 via PKD VOR/DME R-359 to CELIS/PKD 30 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	134.75 251.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 25	1589-¾ 200 (200-¾)			
S-LOC 25	1720-1 331 (400-1)			
CIRCLING	1840-1 449 (500-1)	1860-1 469 (500-1)	1860-1½ 469 (500-1½)	1960-2 569 (600-2)

HIRL Rwy 13-31 L
MIRL Rwy 7-25 L
REIL Rwys 7, 25, and 31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC I-MDI	APP CRS	Rwy Idg	7002
111.9	310°	TDZE	1389
		Apt Elev	1391

ILS or LOC RWY 31

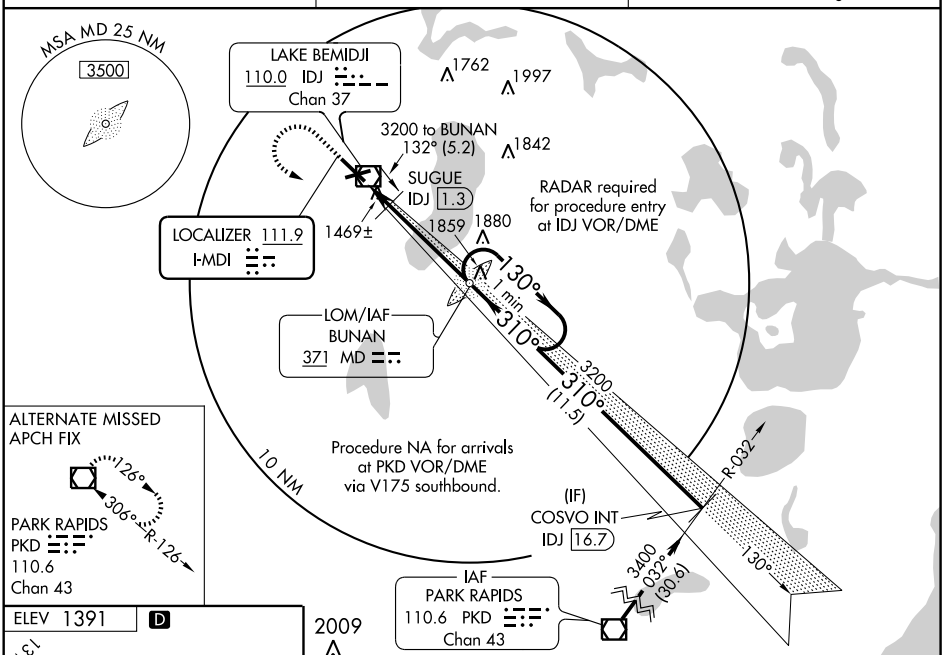
BEMIDJI RGNL (BJI)

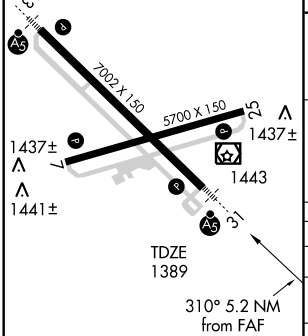
ADF required. Autopilot coupled approach NA below 2093. When local altimeter setting not received, use Park Rapids altimeter setting and increase DA 93 feet and all MDA 100 feet, increase S-LOC 31 Cat C/D visibility ¼ mile. For inoperative MALSR when using Park Rapids altimeter setting, increase S-ILS 31 all Cats visibility to 1 mile. SUGUE Fix minimums NA when using Park Rapids altimeter setting.
**DME from IDJ VOR/DME.

MALSR

MISSED APPROACH: Climb to 2300 then climbing left turn to 3200 direct BUNAN LOM and hold.

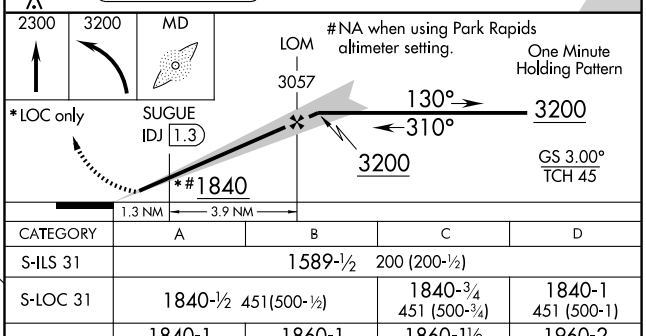
AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	134.75 251.1	122.8 (CTAF) L





HIRL Rwy 13-31 L
MIRL Rwy 7-25 L
REIL Rwys 7, 25 and 31 L

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44



CATEGORY	A	B	C	D
S-ILS 31	1589-½ 200 (200-½)			
S-LOC 31	1840-½ 451(500-½)		1840-¾ 451 (500-¾)	1840-1 451 (500-1)
CIRCLING	1840-1 449 (500-1)	1860-1 469 (500-1)	1860-1½ 469 (500-1½)	1960-2 569 (600-2)
** SUGUE FIX MINIMUMS				
S-LOC 31	1780-½ 391 (400-½)			1780-¾ 391 (400-¾)
CIRCLING	1840-1 449 (500-1)	1860-1 469 (500-1)	1860-1½ 469 (500-1½)	1960-2 569 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	7002
130°	TDZE	1391
	Apt Elev	1391

RNAV (GPS) RWY 13

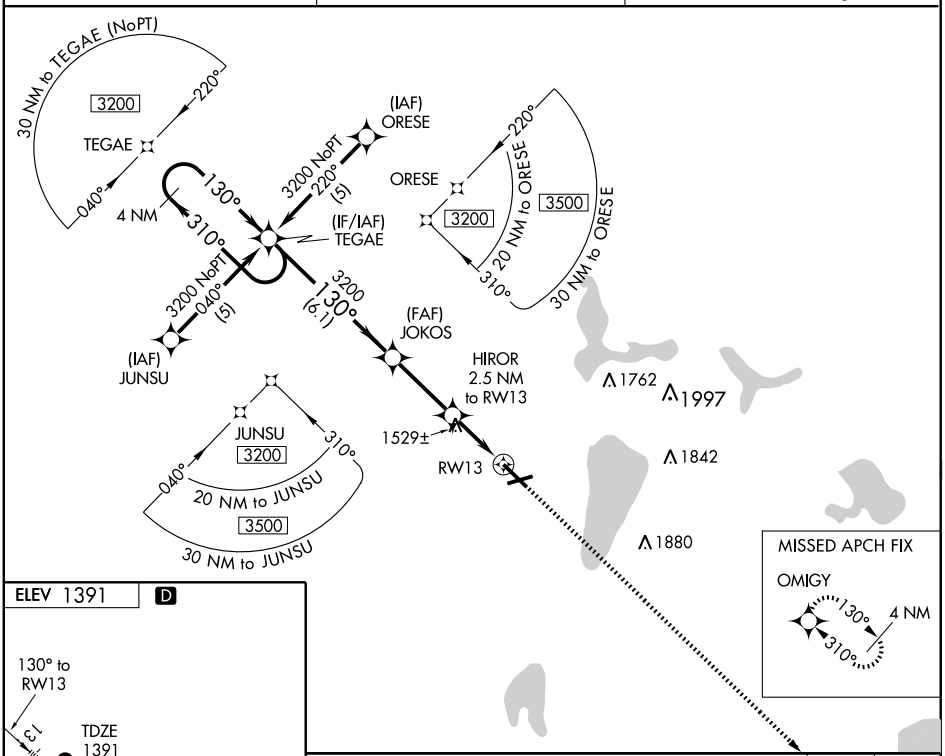
BEMIDJI RGNL (BJI)

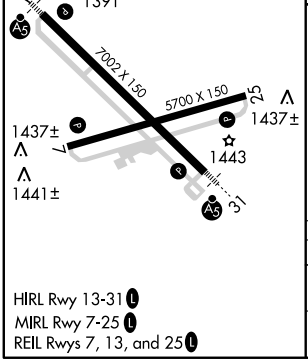
For inoperative MALSR, increase LNAV Cats A/B/C visibility to 1 mile, Cat D visibility to 1¼ mile. DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA. VDP NA when using Park Rapids altimeter setting. When local altimeter setting not received, use Park Rapids altimeter setting, and increase all MDA 100 feet. For inoperative MALSR when using Park Rapids altimeter setting, increase LNAV Cats A/B visibilities to 1 mile.

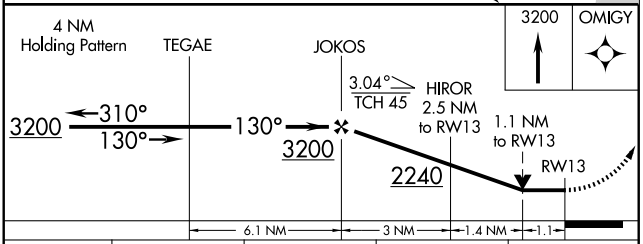
MALSR

MISSED APPROACH: Climb to 3200 direct OMIGY and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	134.75 251.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1780-¾ 389 (400-¾)			1780-1 389 (400-1)
CIRCLING	1840-1 449 (500-1)	1860-1 469 (500-1)	1860-1½ 469 (500-1½)	1960-2 569 (600-2)

HIRL Rwy 13-31 L
MIRL Rwy 7-25 L
REIL Rwys 7, 13, and 25 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 25

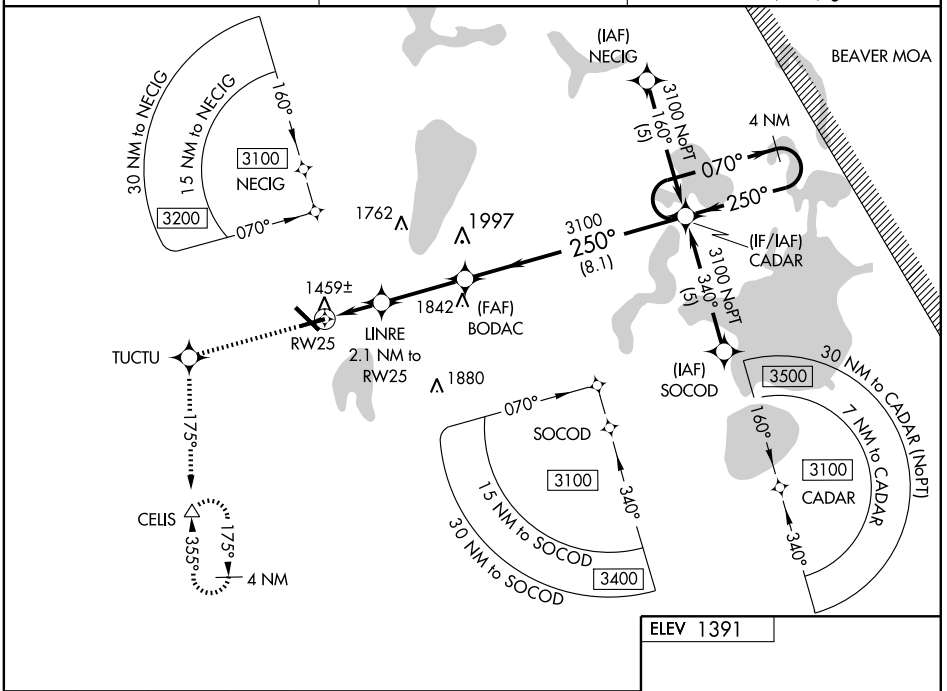
BEMIDJI RGNL (BJI)

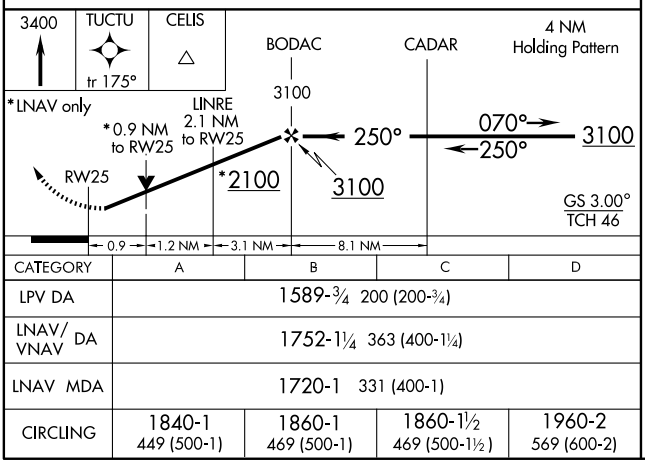
WAAS	APP CRS	Rwy ldg	5700
CH 65917	250°	TDZE	1389
W25A		Apt Elev	1391

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Park Rapids altimeter setting and increase all DA 93 feet and all MDA 100 feet, increase LPV all Cats visibility and LNAV Cat C visibility ¼ mile, LNAV/VNAV all Cats visibility and LNAV Cat D visibility ½ mile. Baro-VNAV NA when using Park Rapids altimeter setting. VDP NA with Park Rapids altimeter setting.

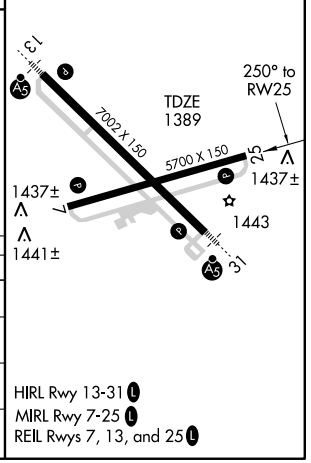
MISSED APPROACH: Climb to 3400 direct TUCTU and on track 175° to CELIS and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	134.75 251.1	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1589-¾ 200 (200-¾)			
LNAV/VNAV DA	1752-1¼ 363 (400-1¼)			
LNAV MDA	1720-1 331 (400-1)			
CIRCLING	1840-1 449 (500-1)	1860-1 469 (500-1)	1860-1½ 469 (500-1½)	1960-2 569 (600-2)



HIRL Rwy 13-31 L
MIRL Rwy 7-25 L
REIL Rwys 7, 13, and 25 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	7002
CH 99711	310°	TDZE	1389
W31A		Apt Elev	1391

RNAV (GPS) RWY 31

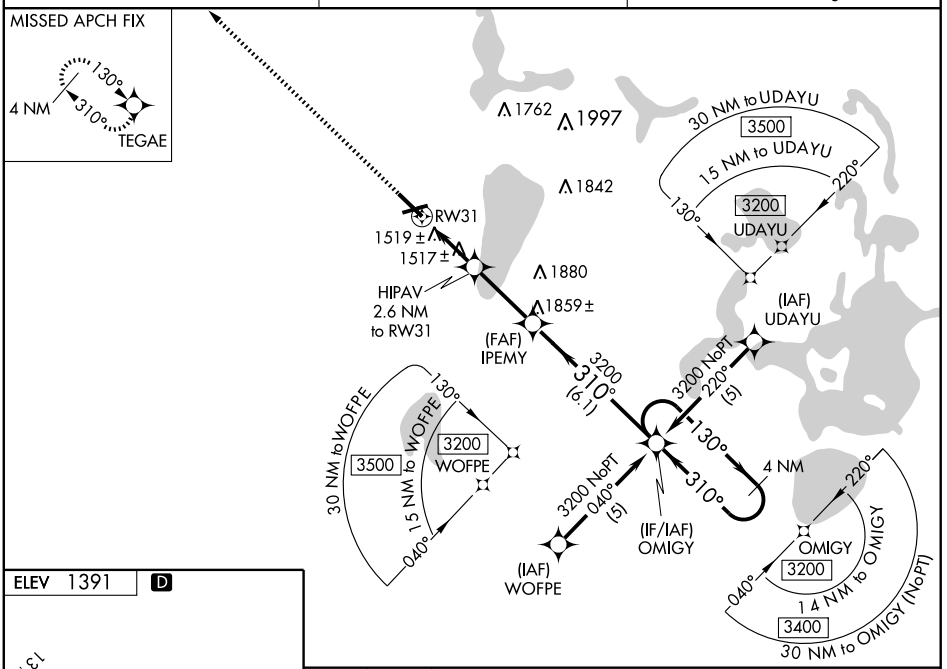
BEMIDJI RGNL (BJI)

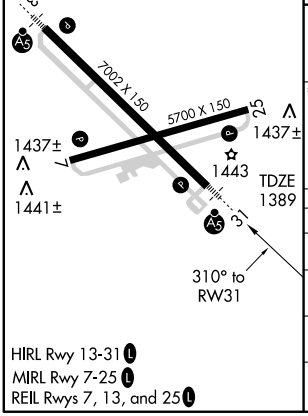
For inoperative MALSR, increase LNAV Cat D visibility to 1¼ mile. Baro-VNAV NA when using Park Rapids altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP -0.3 NA. VDP NA when using Park Rapids altimeter setting. When local altimeter setting not received, use Park Rapids altimeter setting and increase all DA 93 feet and all MDA 100 feet; increase LNAV/VNAV all Cats visibility ½ mile and LNAV Cat C visibility ¼ mile. For inoperative MALSR when using Park Rapids altimeter setting, increase LPV visibility to 1 mile all Cats.

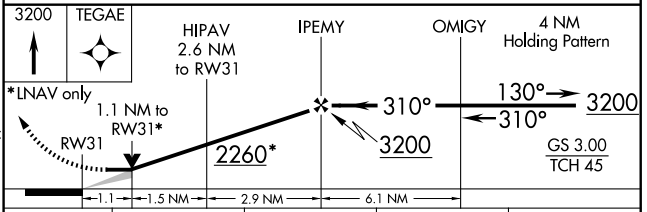
MALSR

MISSED APPROACH: Climb to 3200 direct TEGAE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	134.75 251.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1589-½ 200 (300-½)			
LNAV/VNAV DA	1825-1 436 (500-1)			
LNAV MDA	1780-½ 391 (400-½)			1780-1 391 (400-1)
CIRCLING	1840-1 449 (500-1)	1860-1 469 (500-1)	1860-1½ 469 (500-1½)	1960-2 569 (600-2)

HIRL Rwy 13-31 L
MIRL Rwy 7-25 L
REIL Rwys 7, 13, and 25 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME IDJ	APP CRS	Rwy Idg 7002
110.0	123°	TDZE 1391
Chan 37		Apt Elev 1391

VOR/DME RWY 13

BEMIDJI RGNL (BJI)

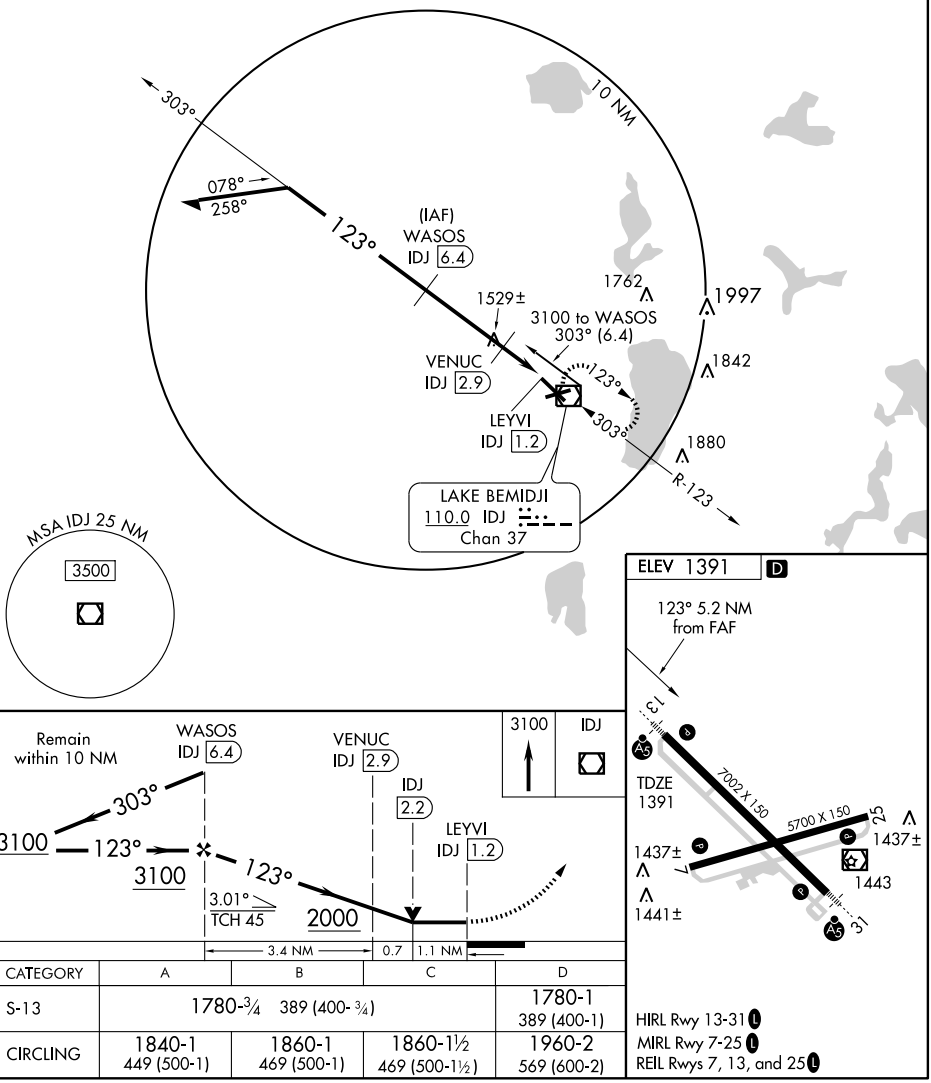
T NA — When local altimeter setting not received, use Park Rapids altimeter setting and increase all MDA 100 feet. VDP NA with Park Rapids altimeter setting. For inoperative MALSR increase S-13 Cats A, B and C visibility to 1 mile and Cat D visibility to 1¼ mile. For inoperative MALSR when using Park Rapids altimeter setting, increase S-13 Cats A and B visibility to 1 mile.

MALSR

MISSED APPROACH: Climb to 3100 direct IDJ VOR/DME and hold, continue to climb-in-hold to 3100.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	134.75 251.1	122.8 (CTAF) L

RADAR REQUIRED



CATEGORY	A	B	C	D
S-13	1780-¾ 389 (400-¾)			1780-1 389 (400-1)
CIRCLING	1840-1 449 (500-1)	1860-1 469 (500-1)	1860-1½ 469 (500-1½)	1960-2 569 (600-2)

HIRL Rwy 13-31 L
MIRL Rwy 7-25 L
REIL Rwys 7, 13, and 25 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME RWY 31

BEMIDJI RGNL (BJI)

VOR/DME IDJ 110.0 Chan 37	APP CRS 328°	Rwy Idg 7002 TDZE 1389 Apt Elev 1391

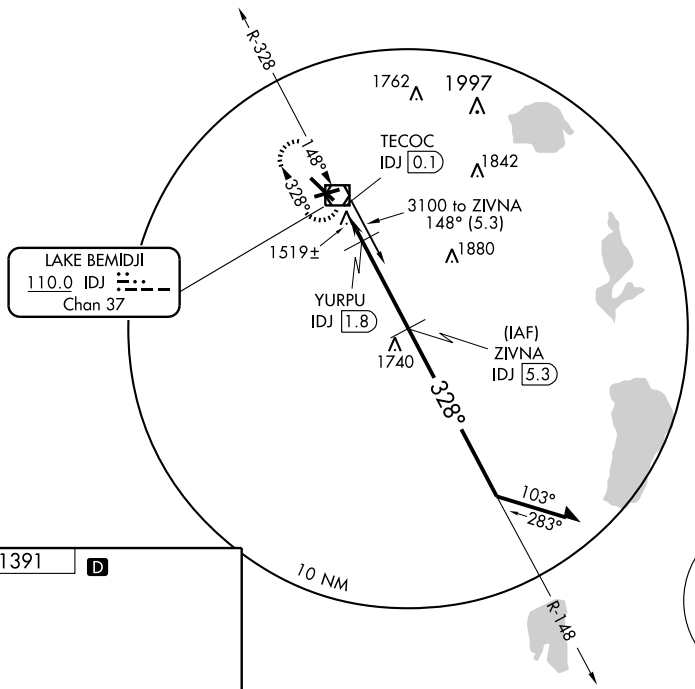
When local altimeter setting not received, use Park Rapids altimeter setting and increase all MDA 100 feet, increase S-31 Cat C visibility ¼ mile. VDP NA with Park Rapids altimeter setting. For inoperative MALSR, increase S-31 Cat D visibility to 1¼ mile.

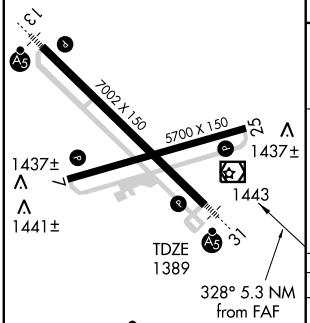
MALSR

MISSED APPROACH: Climb to 3100 direct IDJ VOR/DME and hold, continue climb-in-hold to 3100.

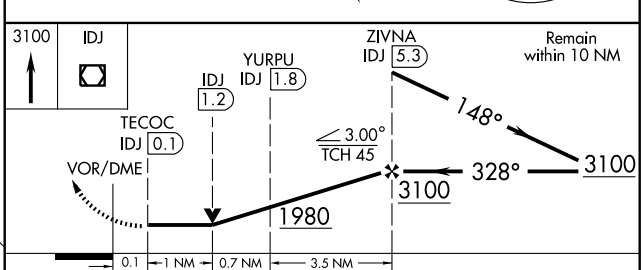
AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	134.75 251.1	122.8 (CTAF)

RADAR REQUIRED





HIRL Rwy 13-31 L
MIRL Rwy 7-25 L
REIL Rwys 7, 13, and 25 L



CATEGORY	A	B	C	D
S-31	1780-½ 391 (400-½)			1780-1 391 (400-1)
CIRCLING	1840-1 449 (500-1)	1860-1 469 (500-1)	1860-1½ 469 (500-1½)	1960-2 569 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

BEMIDJI

BEMIDJI RGNL (BJI) 3 NW UTC−6(−5DT) N47°30.64′ W94°56.08′

TWIN CITIES
H–2J, L–14H
IAP

1391 B S4 **FUEL** 100LL, JET A OX 3,4 Class I, ARFF Index A NOTAM FILE BJI

RWY 13–31: H7002X150 (ASPH–GRVD) S–75, D–200 HIRL

RWY 13: MALSR. PAPI(P4L)—GA 3.0° TCH 45′.

RWY 31: REIL. MALSR. PAPI(P4L)—GA 3.0° TCH 45′.

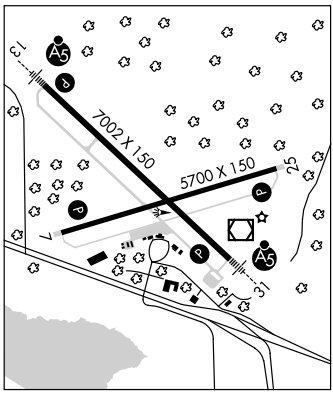
RWY 07–25: H5700X150 (ASPH–GRVD) S–75, D–200 MIRL

RWY 07: REIL. PAPI(P4L)—GA 3.0° TCH 43′. Trees.

RWY 25: REIL. PAPI(P4L)—GA 3.0° TCH 47′.

RUNWAY DECLARED DISTANCE INFORMATION

RWY 07:	TORA–5700	TODA–5700	ASDA–5700	LDA–5700
RWY 13:	TORA–7002	TODA–7002	ASDA–7002	LDA–7002
RWY 25:	TORA–5700	TODA–5700	ASDA–5700	LDA–5700
RWY 31:	TORA–7002	TODA–7002	ASDA–7002	LDA–7002



AIRPORT REMARKS: Attended Mon–Fri 1200–0300Z‡, Sat–Sun 1400–0200Z‡ in summer and Sat–Sun 1400–0000Z‡ in winter. Deer and birds on and invof arpt. Snow removal crews will be monitoring CTAF during all air carrier operations for airfield condition information. ARFF crews will be monitoring CTAF during all air carrier operations. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats, call arpt manager 218–444–2438. Air carrier ops involving acft with more than 30 passengers are not authorized in excess of 15 minutes before or after scheduled arrival/departure times without prior coordination with arpt manager and confirmation that ARFF is avbl prior to landing or takeoff. HIRL Rwy 13–31 preset on low ints, to increase ints and ACTIVATE MIRL Rwy 07–25; REIL Rwy 07, Rwy 31 and Rwy 25 and PAPI Rwy 07, Rwy 25, Rwy 13 and Rwy 31, MALSR Rwy 13 and Rwy 31—CTAF.

WEATHER DATA SOURCES: AWOS–3 119.275 (218) 759–2501. **HIWAS** 108.6 BJI.

COMMUNICATIONS: CTAF/UNICOM 122.8

RCO 123.6 (PRINCETON RADIO)

MINNEAPOLIS CENTER APP/DEP CON 134.75

AIRSPACE: CLASS E svc Mon–Sat 1045–0545Z‡, Sun 1400–0545Z‡ other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE BJI.

(L) VORTACW 108.6 BJI Chan 23 N47°34.55′ W95°01.49′ 133° 5.4 NM to fld. 1410/4E. **HIWAS.** VOR portion OTS indef. VOR portion unusable 011°–050° blo 6000′. DME unusable byd 30 NM blo 3500′.

LAKE BEMIDJI (T) VOR/DME 110.0 IDJ Chan 37 N47°30.47′ W94°55.40′ at fld. 1384/4E. Associated with AWOS–3 (BJI).

BUNAN NDB (LOM) 371 MD N47°26.70′ W94°50.10′ 310° 5.7 NM to fld. Unmonitored.

ILS 111.9 I–MDI Rwy 31 LOM BUNAN NDB. LOM unmonitored.

ILS/DME 109.35 I–BJI Chan 030(Y) Rwy 25. Class IA.

BENSON MUNI (BBB) 2 W UTC−6(−5DT) N45°19.92′ W95°39.04′

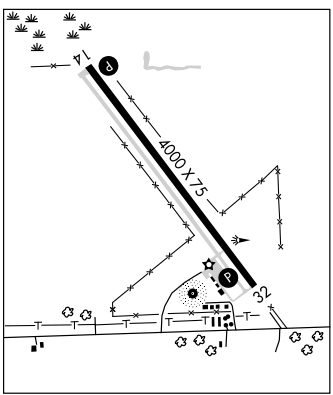
TWIN CITIES
L–14H
IAP

1039 B S2 **FUEL** 100LL NOTAM FILE BBB

RWY 14–32: H4000X75 (ASPH) S–40, D–50 MIRL

RWY 14: REIL. PAPI(P4L)—GA 3.0° TCH 40′. Trees. Rgt tfc.

RWY 32: REIL. PAPI (P4L)–GA 3.0° TCH 41′. Trees.



AIRPORT REMARKS: Unattended. Self svc fuel avbl 24 hrs with credit card. Ultralight acft on and invof the arpt. Category C and D acft ops prohibited. Rwy 14 PAPI unusable byd 2 NM. ACTIVATE PAPI Rwy 14 and Rwy 32, REIL Rwy 14 and Rwy 32 and MIRL Rwy 14–32—CTAF.

WEATHER DATA SOURCES: AWOS–3 239 BBB (320) 843–3242.

COMMUNICATIONS: CTAF/UNICOM 122.8

MINNEAPOLIS CENTER APP/DEP CON 125.5

RADIO AIDS TO NAVIGATION: NOTAM FILE MOX.

MORRIS (T) VORW/DME 109.6 MOX Chan 33 N45°33.95′ W95°58.15′ 131° 19.4 NM to fld. 1132/5E. Unmonitored.

NDB (MHW) 239 BBB N45°19.63′ W95°39.06′ at fld. **AWOS–3**. NOTAM FILE BBB. Unmonitored.

NDB BBB 239	APP CRS 148°	Rwy Idg 4000 TDZE 1039 Apt Elev 1039

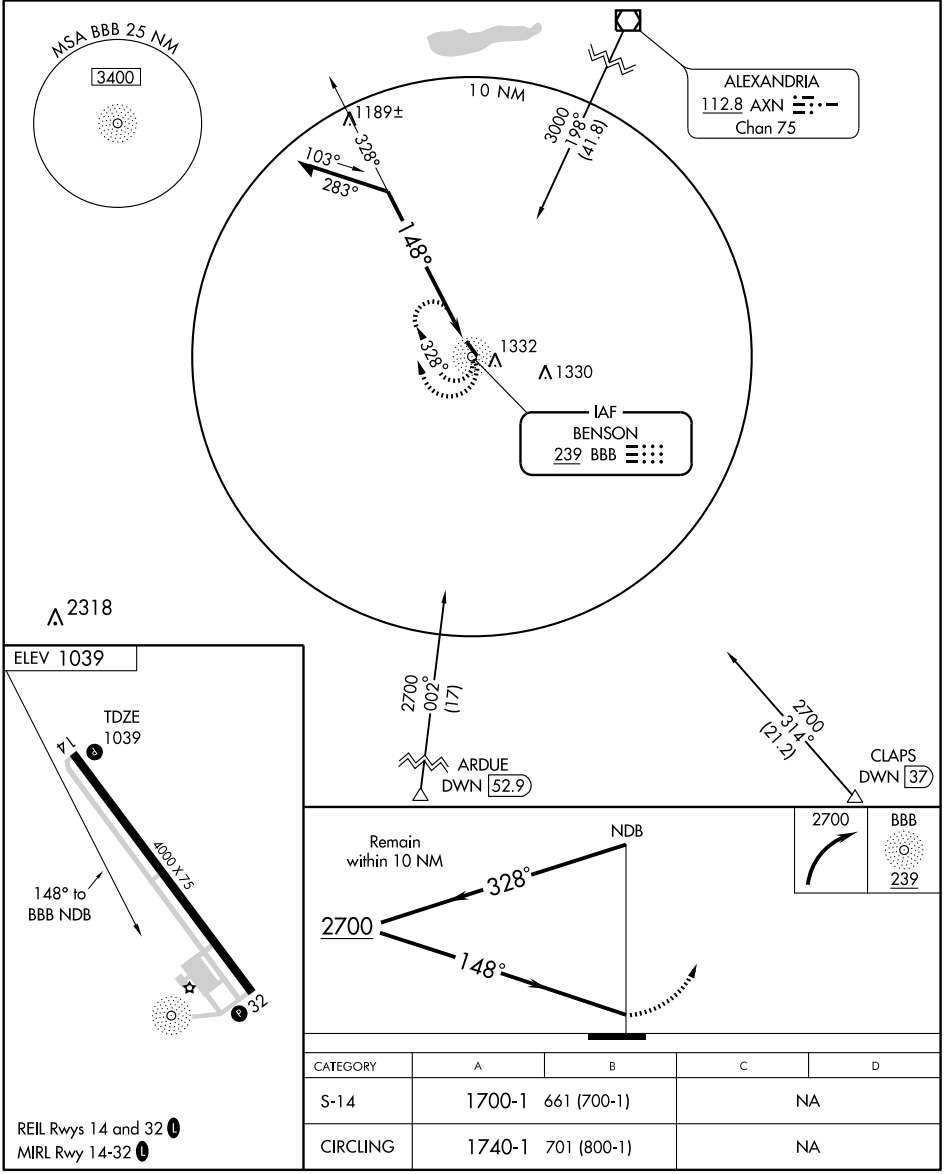
NDB RWY 14
BENSON MUNI (BBB)

NA

If local altimeter setting not recieved, use Appleton altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climbing right turn to 2700 in BBB NDB holding pattern.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
239	125.5 323.1	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-14	1700-1	661 (700-1)	NA	
CIRCLING	1740-1	701 (800-1)	NA	

REIL Rwys 14 and 32 L
MIRL Rwy 14-32 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

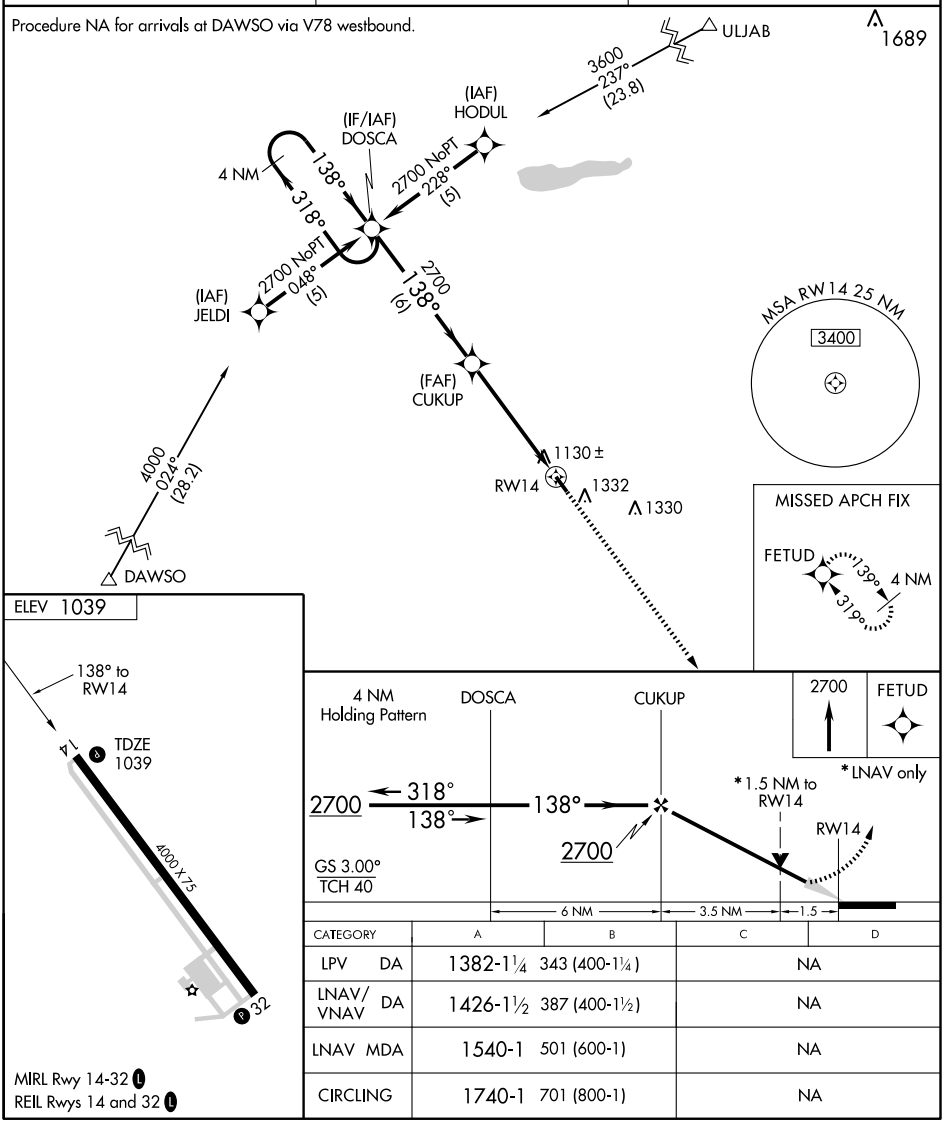
WAAS	APP CRS	Rwy Idg	4000
CH 49210	138°	TDZE	1039
W14A		Apt Elev	1039

RNAV (GPS) RWY 14
BENSON MUNI (BBB)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F).
DME/DME RNP -0.3 NA.
Baro-VNAV and VDP NA when using Appleton altimeter setting.
When local altimeter setting not received, use Appleton altimeter setting and increase all DA and MDA 40 feet, increase Circling Cat B visibility ¼ mile.

MISSED APPROACH: Climb to 2700 direct FETUD and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
239	125.5 323.1	122.8 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1382-1¼	343 (400-1¼)	NA	
LNAV/VNAV DA	1426-1½	387 (400-1½)	NA	
LNAV MDA	1540-1	501 (600-1)	NA	
CIRCLING	1740-1	701 (800-1)	NA	

NC-1, 21 OCT 2010 to 18 NOV 2010

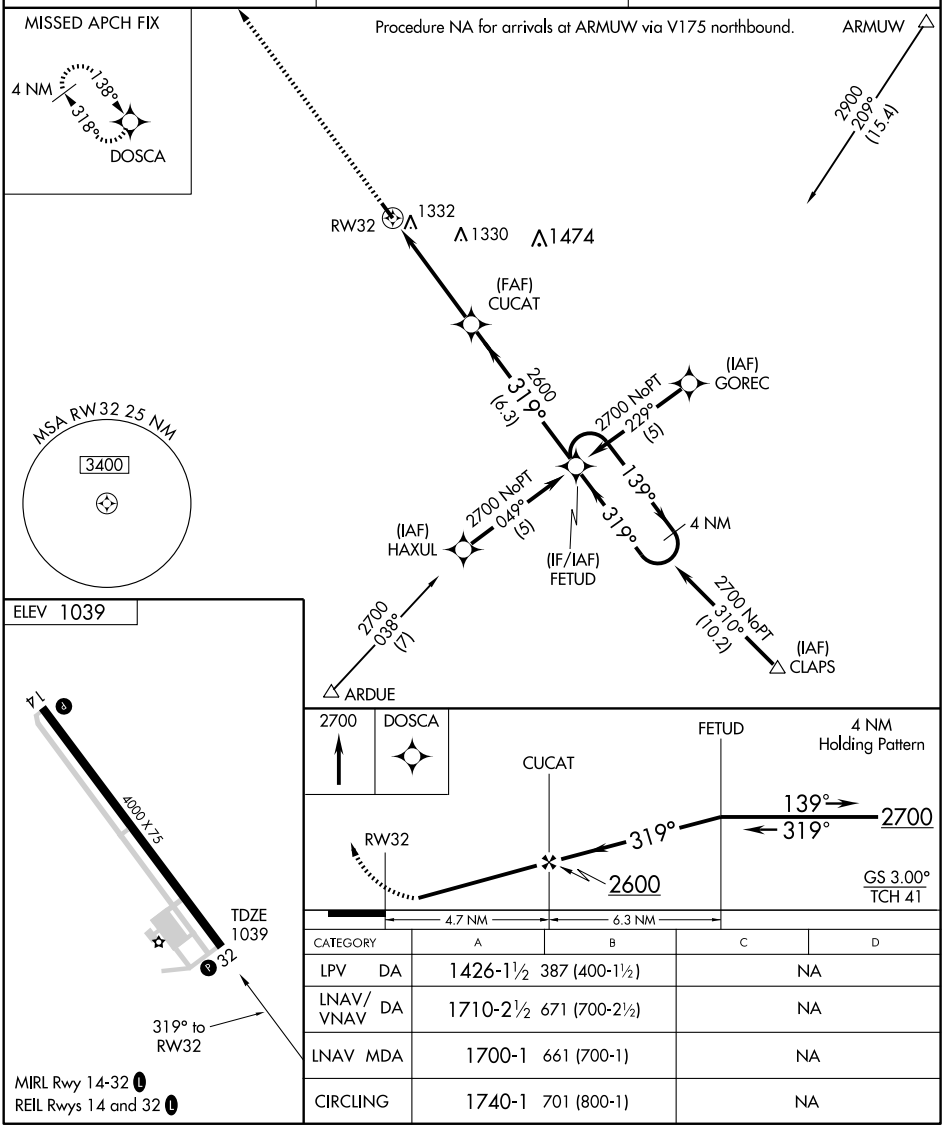
WAAS	APP CRS	Rwy Idg	4000
CH 99710	319°	TDZE	1039
W32A		Apt Elev	1039

RNAV (GPS) RWY 32
BENSON MUNI (BBB)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F).
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.
Baro-VNAV NA when using Appleton altimeter setting.
When local altimeter setting not received, use Appleton altimeter setting and increase all DA and MDA 40 feet, increase Circling Cat B visibility ¼ mile.

MISSED APPROACH: Climb to 2700 direct DOSCA and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
239	125.5 323.1	122.8 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1426-1½ 387 (400-1½)		NA	
LNAV/VNAV DA	1710-2½ 671 (700-2½)		NA	
LNAV MDA	1700-1 661 (700-1)		NA	
CIRCLING	1740-1 701 (800-1)		NA	

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

BIG FALLS MUNI (7Y9) 3 NE UTC−6(−5DT) N48°12.03′ W93°45.74′ **TWIN CITIES**

1232 NOTAM FILE PNM

RWY 03–21: 2850X100 (TURF)

RWY 21: Thld dsplcd 785′.

RWY 11–29: 2602X200 (TURF) LIRL (NSTD)

RWY 11: Trees. **RWY 29:** Trees.

AIRPORT REMARKS: Unattended. Arpt surfaces not plowed in winter, call arpt manager 218–556–4827, or check NOTAMS. Ultralight tfc on and invof arpt. Rwy 11–29 marked with yellow cones. Rwy 11–29 NSTD LIRL due to spacing.

COMMUNICATIONS: CTAF 122.9

BIGFORK MUNI (FOZ) 2 N UTC−6(−5DT) N47°46.97′ W93°39.01′ **TWIN CITIES**

1348 B NOTAM FILE FOZ **L–14H**

RWY 15–33: H3100X75 (ASPH) MIRL **IAP**

AIRPORT REMARKS: Unattended. 350′ microwave twr 2 miles South Rwy 15. Deer and waterfowl on and invof arpt. Rwy 15–33 cracks. ACTIVATE MIRL Rwy 15–33—CTAF.

WEATHER DATA SOURCES: AWOS–3 345 FOZ (218) 743–3289.

COMMUNICATIONS: CTAF 122.9

MINNEAPOLIS CENTER APP/DEP CON 127.9

GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE GPZ.

GRAND RAPIDS (L) VORW/DME 111.4 GPZ Chan 51 N47°09.82′ W93°29.31′ 344° 37.8 NM to fld. 1400/6E.

NDB (MHW) 345 FOZ N47°47.01′ W93°39.24′ at fld. **AWOS–3**. NOTAM FILE FOZ.

BLUE EARTH MUNI (SBU) 3 S UTC−6(−5DT) N43°35.72′ W94°05.57′ **OMAHA**

1107 B S2 **FUEL** 100LL, JET A TPA—2107(1000) NOTAM FILE PNM **L–12I**

RWY 16–34: H3399X75 (ASPH) MIRL 0.4% up SE **IAP**

RWY 16: Silo. **RWY 34:** Road.

RWY 03–21: 2280X200 (TURF)

RWY 03: Trees. **RWY 21:** Road.

AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. For svc after hrs call 507–525–3068 or 507–525–3064 or 507–526–2056. Rwy 03–21 CLOSED winter months. Deer and waterfowl on and invof arpt. Rwy 03–21 marked with yellow cones. ACTIVATE MIRL Rwy 16–34—CTAF.

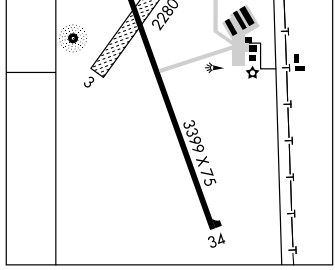
COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.75

RADIO AIDS TO NAVIGATION: NOTAM FILE FRM.

FAIRMONT (L) VOR/DME 110.2 FRM Chan 39 N43°38.76′ W94°25.35′ 095° 14.7 NM to fld. 1164/7E.

NDB (MHW) 332 SBU N43°35.82′ W94°05.81′ at fld. NOTAM FILE PNM.



BOWSTRING (9Y0) 2 NW UTC−6(−5DT) N47°33.49′ W93°52.20′ **TWIN CITIES**

1372 NOTAM FILE PNM

RWY 07–25: 2531X150 (TURF) LIRL

RWY 25: Trees

AIRPORT REMARKS: Unattended. Arpt plowed winter months. Deer on and invof arpt. Rwy 07–25 marked with yellow cones.

COMMUNICATIONS: CTAF 122.9

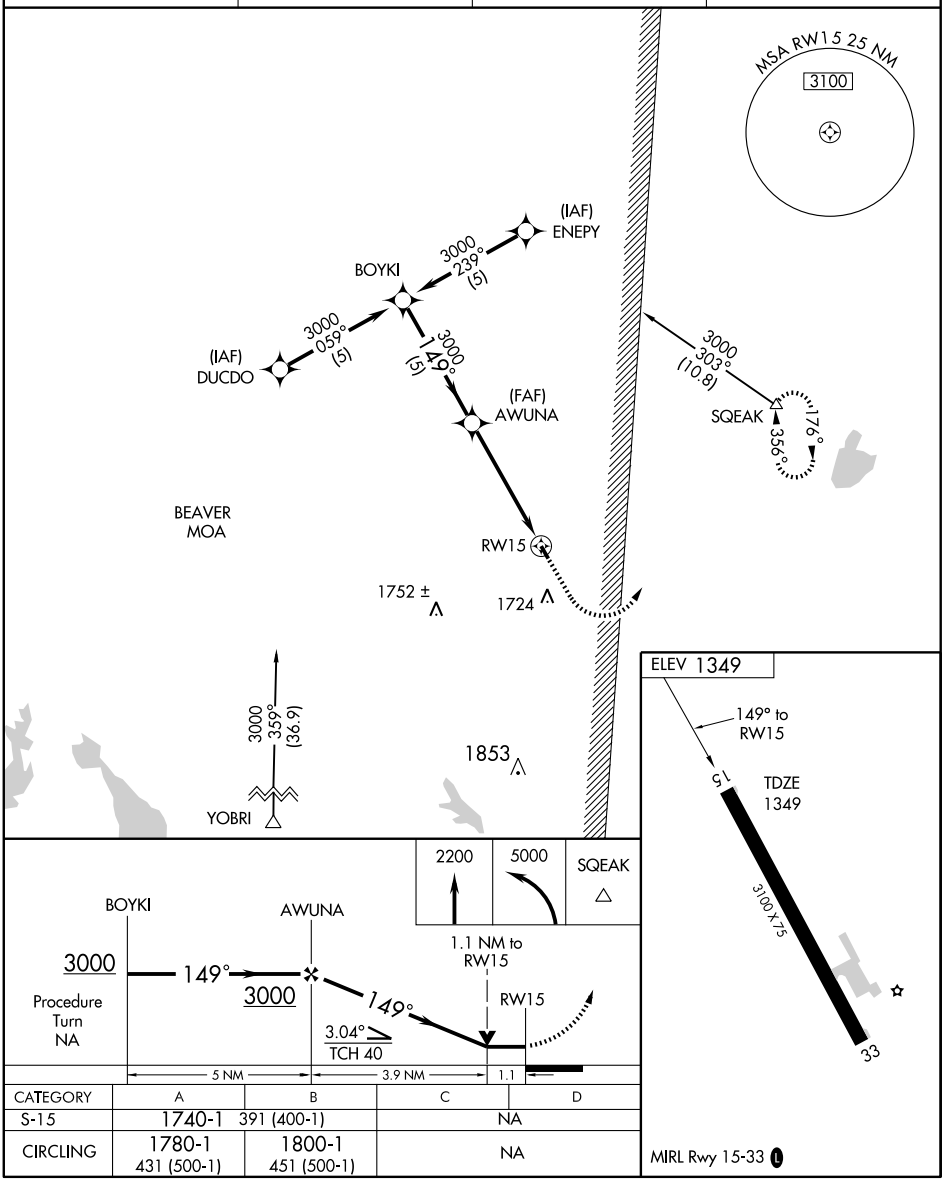
GPS RWY 15
BIGFORK MUNI (FOZ)

APP CRS	Rwy Idg	3100
149°	TDZE	1349
	Apt Elev	1349

NA

MISSED APPROACH: Climb to 2200 then climbing left turn to 5000 direct SQEAK and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
345	127.9 281.45	121.725	122.9 L



CATEGORY	A	B	C	D
S-15	1740-1	391 (400-1)	NA	
CIRCLING	1780-1 431 (500-1)	1800-1 451 (500-1)	NA	

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

NDB FOZ 345	APP CRS 160°	Rwy Idg 3100 TDZE 1346 Apt Elev 1348

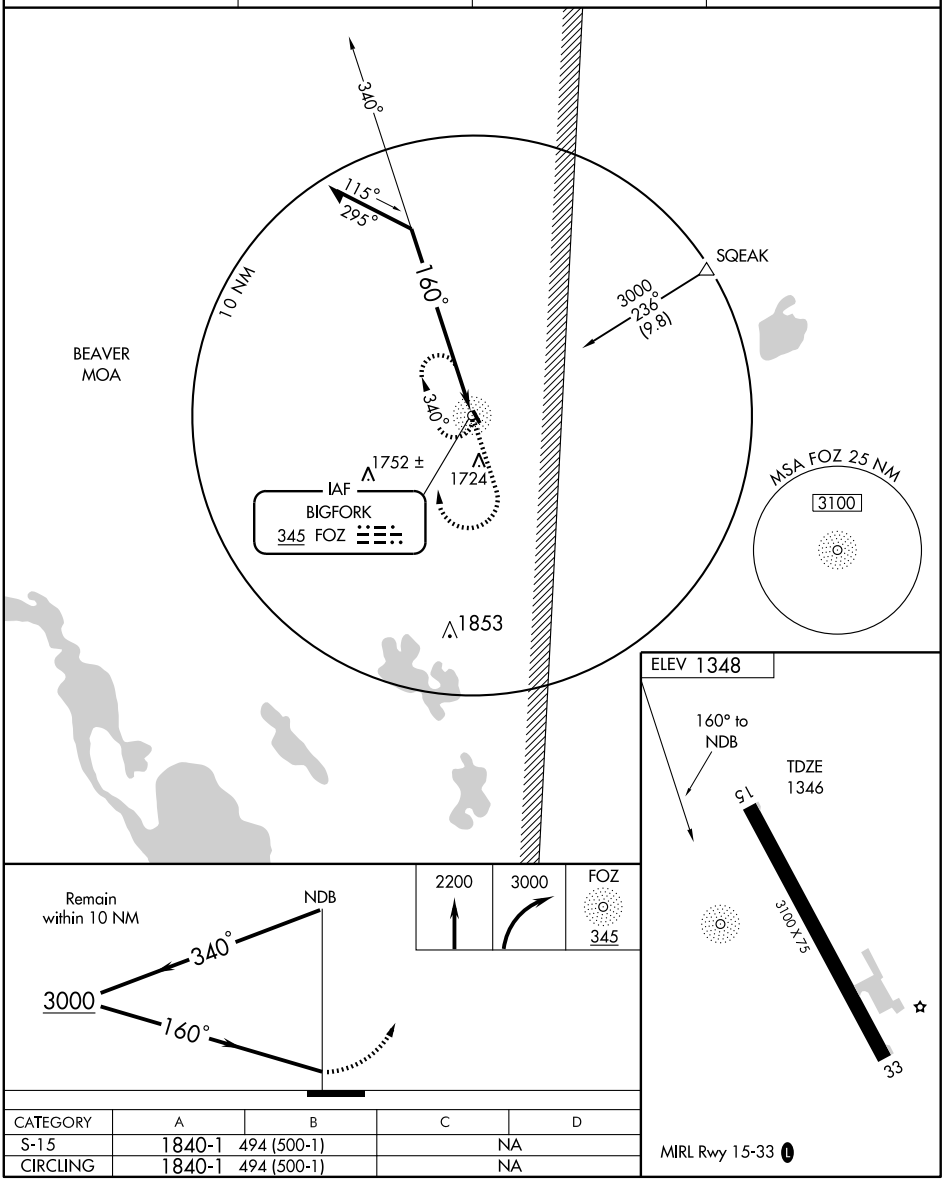
NDB RWY 15
BIGFORK MUNI (FOZ)

Procedure not authorized when BEAVER MOA is active.

NA

MISSED APPROACH: Climb to 2200 then climbing right turn to 3000 direct FOZ NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
345	127.9 281.45	121.725	122.9 (L)



CATEGORY	A	B	C	D
S-15	1840-1	494 (500-1)	NA	
CIRCLING	1840-1	494 (500-1)	NA	

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

BIG FALLS MUNI (7Y9) 3 NE UTC−6(−5DT) N48°12.03′ W93°45.74′ **TWIN CITIES**

1232 NOTAM FILE PNM

RWY 03–21: 2850X100 (TURF)

RWY 21: Thld dsplcd 785′.

RWY 11–29: 2602X200 (TURF) LIRL (NSTD)

RWY 11: Trees. **RWY 29:** Trees.

AIRPORT REMARKS: Unattended. Arpt surfaces not plowed in winter, call arpt manager 218–556–4827, or check NOTAMS. Ultralight tfc on and invof arpt. Rwy 11–29 marked with yellow cones. Rwy 11–29 NSTD LIRL due to spacing.

COMMUNICATIONS: CTAF 122.9

BIGFORK MUNI (FOZ) 2 N UTC−6(−5DT) N47°46.97′ W93°39.01′ **TWIN CITIES**

1348 B NOTAM FILE FOZ **L–14H**

RWY 15–33: H3100X75 (ASPH) MIRL **IAP**

AIRPORT REMARKS: Unattended. 350′ microwave twr 2 miles South Rwy 15. Deer and waterfowl on and invof arpt. Rwy 15–33 cracks. ACTIVATE MIRL Rwy 15–33—CTAF.

WEATHER DATA SOURCES: AWOS–3 345 FOZ (218) 743–3289.

COMMUNICATIONS: CTAF 122.9

MINNEAPOLIS CENTER APP/DEP CON 127.9

GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE GPZ.

GRAND RAPIDS (L) VORW/DME 111.4 GPZ Chan 51 N47°09.82′ W93°29.31′ 344° 37.8 NM to fld. 1400/6E.

NDB (MHW) 345 FOZ N47°47.01′ W93°39.24′ at fld. **AWOS–3**. NOTAM FILE FOZ.

BLUE EARTH MUNI (SBU) 3 S UTC−6(−5DT) N43°35.72′ W94°05.57′ **OMAHA**

1107 B S2 **FUEL** 100LL, JET A TPA—2107(1000) NOTAM FILE PNM **L–12I**

RWY 16–34: H3399X75 (ASPH) MIRL 0.4% up SE **IAP**

RWY 16: Silo. **RWY 34:** Road.

RWY 03–21: 2280X200 (TURF)

RWY 03: Trees. **RWY 21:** Road.

AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. For svc after hrs call 507–525–3068 or 507–525–3064 or 507–526–2056. Rwy 03–21 CLOSED winter months. Deer and waterfowl on and invof arpt. Rwy 03–21 marked with yellow cones. ACTIVATE MIRL Rwy 16–34—CTAF.

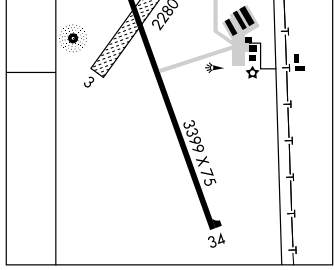
COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.75

RADIO AIDS TO NAVIGATION: NOTAM FILE FRM.

FAIRMONT (L) VOR/DME 110.2 FRM Chan 39 N43°38.76′ W94°25.35′ 095° 14.7 NM to fld. 1164/7E.

NDB (MHW) 332 SBU N43°35.82′ W94°05.81′ at fld. NOTAM FILE PNM.



BOWSTRING (9Y0) 2 NW UTC−6(−5DT) N47°33.49′ W93°52.20′ **TWIN CITIES**

1372 NOTAM FILE PNM

RWY 07–25: 2531X150 (TURF) LIRL

RWY 25: Trees

AIRPORT REMARKS: Unattended. Arpt plowed winter months. Deer on and invof arpt. Rwy 07–25 marked with yellow cones.

COMMUNICATIONS: CTAF 122.9

NDB SBU 332	APP CRS 330°	Rwy Idg 3399 TDZE 1107 Apt Elev 1107

NDB or GPS RWY 34

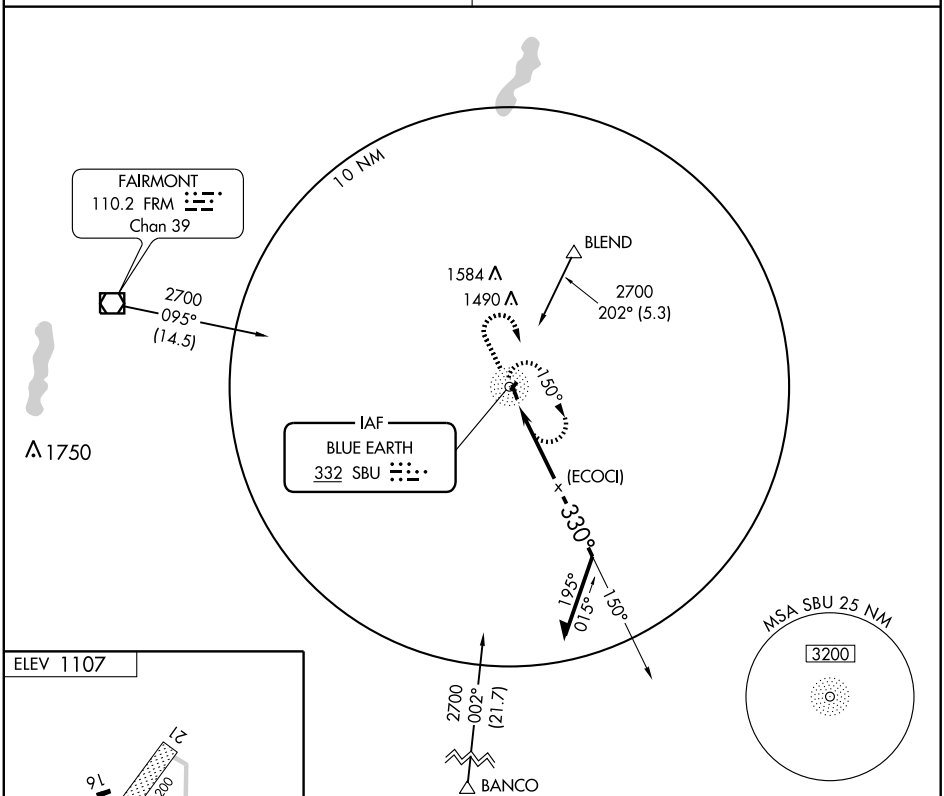
BLUE EARTH MUNI (SBU)

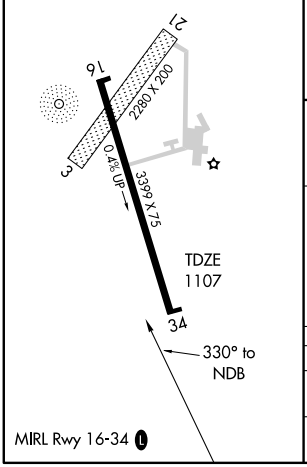
NA Use Fairmont altimeter setting.

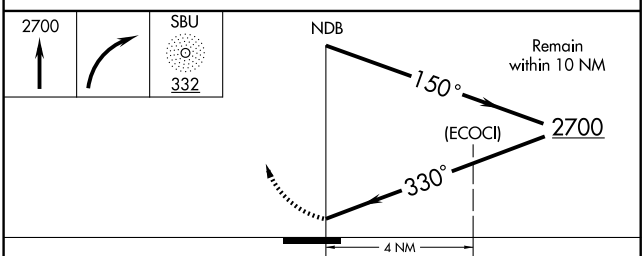
MISSED APPROACH: Climb to 2700 then right turn direct SBU NDB and hold.

MINNEAPOLIS CENTER
127.75 257.7

UNICOM
122.8 (CTAF) L



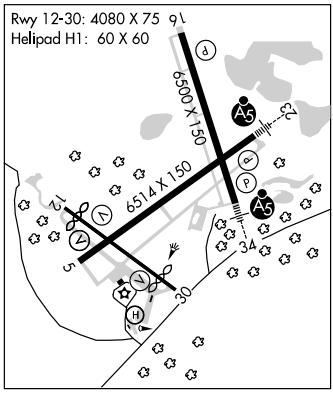




CATEGORY	A	B	C	D
S-34	1700-1	593 (600-1)	1700-1½ 593 (600-1½)	NA
CIRCLING	1700-1	593 (600-1)	1700-1½ 593 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

BRAINERD LAKES RGNL (BRD) 3 NE UTC−6(−5DT) **TWIN CITIES**
N46°24.11′ W94°08.14′ **H–2J, L–14H**
1232 B S4 **FUEL** 100LL, JET A TPA—2232(1000) Class I, ARFF Index A **IAP**
NOTAM FILE BRD



RWY 05–23: H6514X150 (ASPH–TRTD) S–75, D–125, 2S–159, 2D–220 HIRL
RWY 05: REIL. VASI(V4L)—GA 3.0° TCH 46′. Tree.
RWY 23: MALSR. PAPI(P4L)—GA 3.0° TCH 50′. Trees.
RWY 16–34: H6500X150 (CONC–GRVD) S–75, D–125, 2S–158, 2D–220 HIRL
RWY 16: REIL. PAPI(P4L)—GA 3.0° TCH 45′.
RWY 34: MALSR. PAPI(P4R)—GA 3.0° TCH 57′.
RWY 12–30: H4080X75 (ASPH) S–12 MIRL
RWY 12: VASI(V4L)—GA 3.0° TCH 27′. Thld dsplcd 520′. Trees.
RWY 30: REIL. VASI(V4L)—GA 3.0° TCH 26′. Thld dsplcd 571′. Road.

AIRPORT REMARKS: Attended May–Sep 1300–0300Z‡, Oct–Apr 1300–0200Z‡. For attendance other hours, see current phone listing in pilots lounge, 218–829–3398. Deer and gulls on and invof arpt. PPR for unscheduled air carrier ops with more than 30 passenger seats call arpt manager 218–825–2166 between hrs 1400–2300Z‡. Rwy 12–30 not avbl for air carrier ops with more than 9 passenger seats. Air carrier ops involving acft with more than 30 passengers are not authorized in excess of 15 minutes before or after scheduled arrival/departure times without prior coordination with arpt manager and confirmation that ARFF is avbl prior to landing or takeoff. HIRL Rwy 05–23 Rwy 16–34 preset on low ints, to increase ints and ACTIVATE MIRL Rwy 12–30, REIL Rwy 05, Rwy 16, Rwy 30 and MALSR Rwy 23 and Rwy 34—CTAF.

WEATHER DATA SOURCES: ASOS 126.775 (218) 828–3314.
COMMUNICATIONS: CTAF/UNICOM 122.7
RCO 123.65 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 118.05.
AIRSPACE: CLASS E svc Mon–Sat 1100–0500Z‡, Sun 1200–0500Z‡ other times CLASS G.
RADIO AIDS TO NAVIGATION: NOTAM FILE BRD.
(H) VORTACW 116.9 BRD Chan 116 N46°20.89′ W94°01.55′ 302° 5.6 NM to fld. 1260/3E.
VOR portion unusable:
163°–183° blo 4000′ 033°–163° byd 30 NM blo 3000′
183°–283° blo 7000′ 283°–325° byd 6 NM blo 7000′
013°–033° byd 15 NM blo 3400′ 325°–013° byd 30 NM blo 3000′
DME unusable byd 29 NM blo 3000′.
LAREW NDB (LOM) 251 BR N46°27.40′ W94°01.36′ 232° 5.7 NM to fld. Unmonitored.
ILS 109.9 I–BRD Rwy 23. Class IE. LOM LAREW NDB. ILS unmonitored.
ILS 109.7 I–LER Rwy 34. ILS unmonitored.

• • • •

LOC I-BRD	APP CRS	Rwy Idg	6514
109.9	231°	TDZE	1224
		Apt Elev	1232

ILS or LOC RWY 23

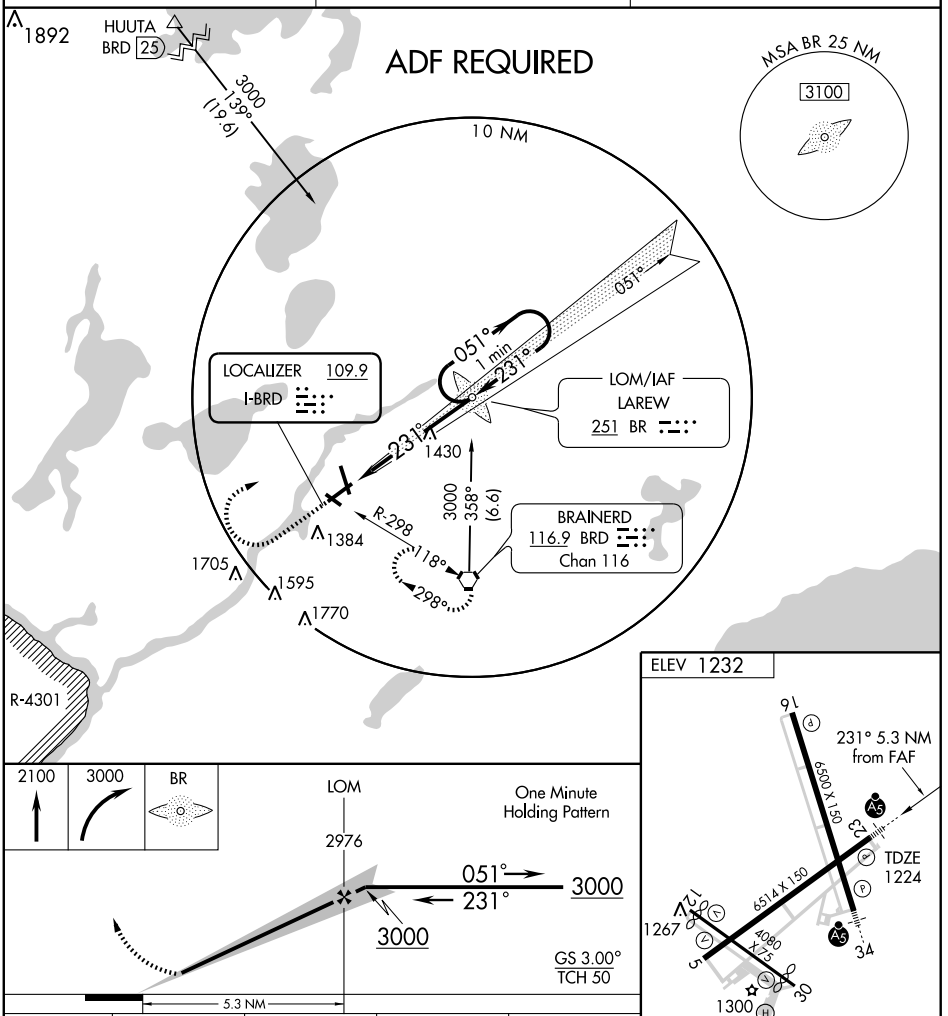
BRAINERD LAKES RGNL (BRD)

If local altimeter setting not received, use Aitkin Muni-Steve Kurtz Field altimeter setting and increase all DAs 52 feet, all MDAs 60 feet.

MALSR

MISSED APPROACH: Climb to 2100 then climbing right turn to 3000 direct LAREW LOM and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	118.05 239.0	122.7 (CTAF) L



CATEGORY	A	B	C	D
S-ILS 23	1424-½ 200 (200-½)			
S-LOC 23	1680-½ 456 (500-½)		1680-¾ 456 (500-¾)	1680-1 456 (500-1)
CIRCLING	1760-1 528 (600-1)		1760-1½ 528 (600-1½)	1800-2 568 (600-2)

HIRL Rwy 5-23 and 16-34 L
MIRL Rwy 12-30 L
REIL Rwys 5, 16, and 30 L

FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC I-LER	APP CRS		
109.7	340°	Rwy Idg	6500
		TDZE	1232
		Apt Elev	1232

ILS or LOC RWY 34

BRAINERD LAKES RGNL (BRD)

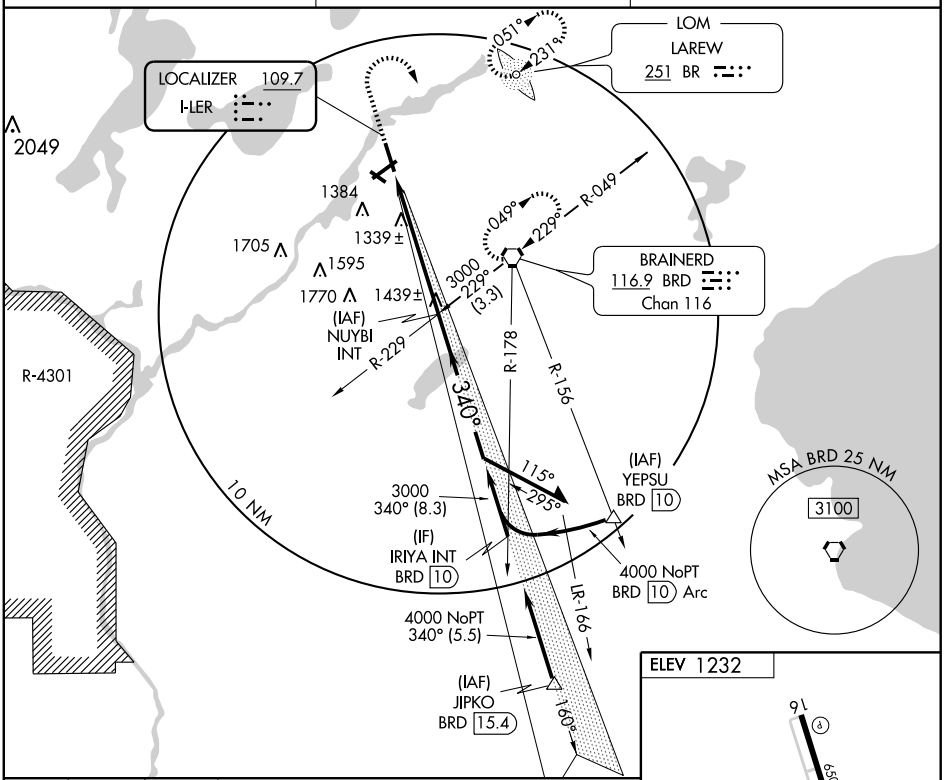
If local altimeter setting not received, use Aitkin altimeter setting and increase DA 52 feet and increase all MDAs 60 feet.

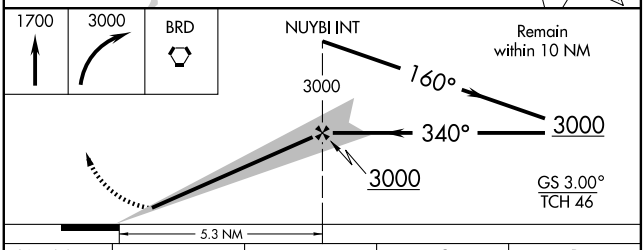
NA

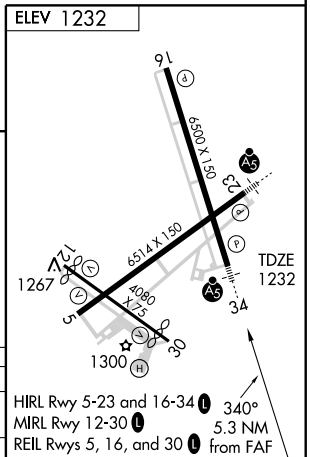
MALSR

MISSED APPROACH: Climb to 1700 then climbing right turn to 3000 direct BRD VORTAC and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	118.05 239.0	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 34	1432-½ 200 (200-½)			
S-LOC 34	1600-½ 368 (400-½)			1600-¾ 368 (400-¾)
CIRCLING	1760-1 528 (600-1)		1760-1½ 528 (600-1½)	1800-2 568 (600-2)

FAF to MAP 5.3 NM

Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOM BR	APP CRS	Rwy Idg	6514
251	231°	TDZE	1224
		Apt Elev	1232

NDB RWY 23

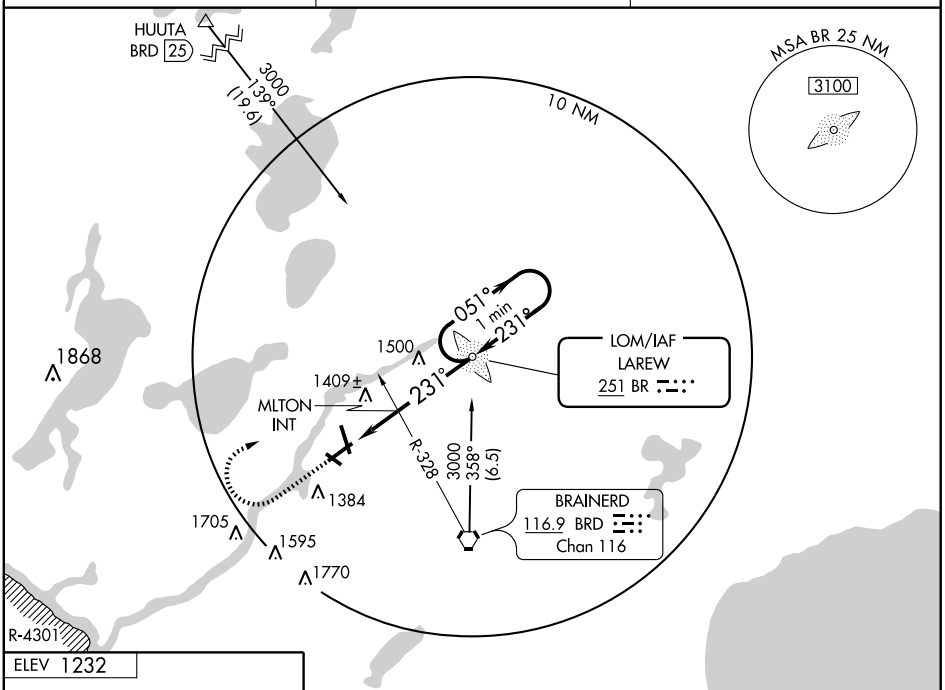
BRAINERD LAKES RGNL (BRD)

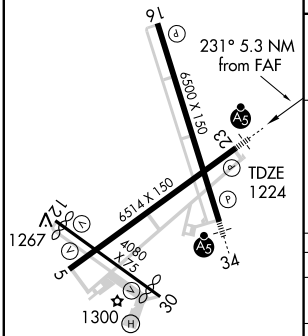
T A NA — If local altimeter setting not received, use Aitkin Muni-Steve Kurtz Field altimeter setting and increase all MDAs 60 feet.

MALSR

MISSED APPROACH: Climb to 3000 then right turn direct BR LOM and hold.

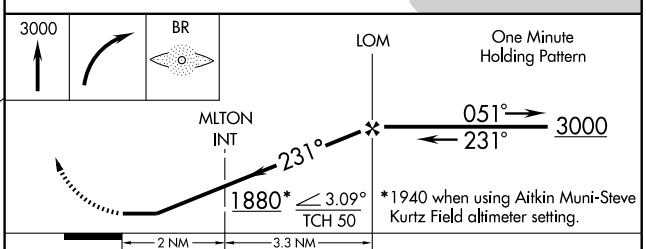
ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	118.05 239.0	122.7 (CTAF) L





HIRL Rwy 5-23 and 16-34 L
MIRL Rwy 12-30 L
REIL Rwys 5, 16, and 30 L

FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46



CATEGORY	A	B	C	D
S- 23	1880-¾ 656 (700-¾)		1880-1¼ 656 (700-1¼)	1880-1¾ 656 (700-1¾)
CIRCLING	1880-1 648 (700-1)		1880-1¾ 648 (700-1¾)	1880-2 648 (700-2)
MLTON FIX MINIMUMS				
S- 23	1720-¾ 496 (500-¾)			1720-1¼ 496 (500-1¼)
CIRCLING	1760-1 528 (600-1)		1760-1½ 528 (600-1½)	1800-2 568 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	6514
CH 82018	050°	TDZE	1223
W05A		Apt Elev	1232

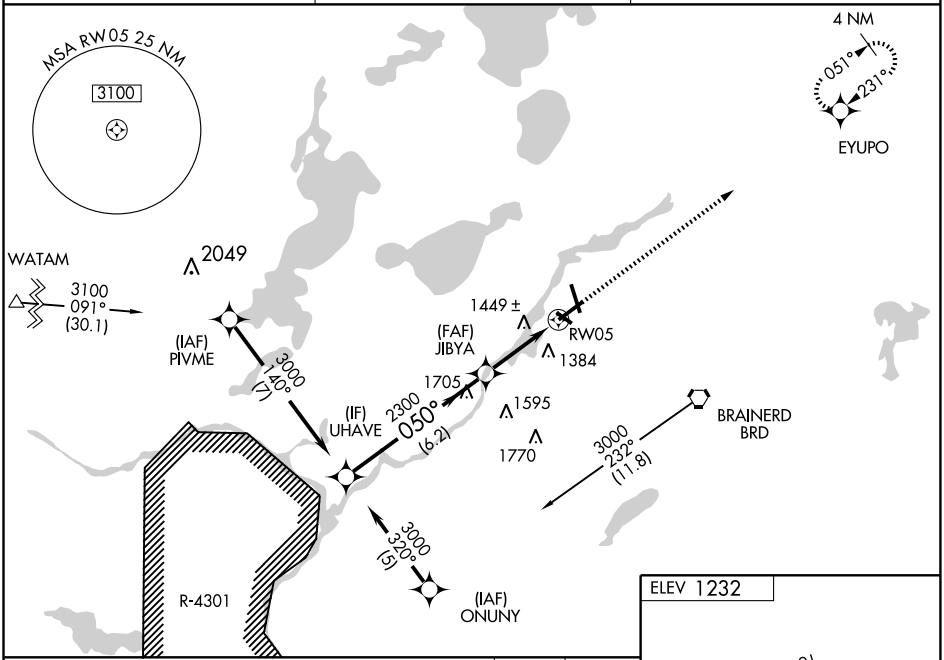
RNAV (GPS) RWY 5

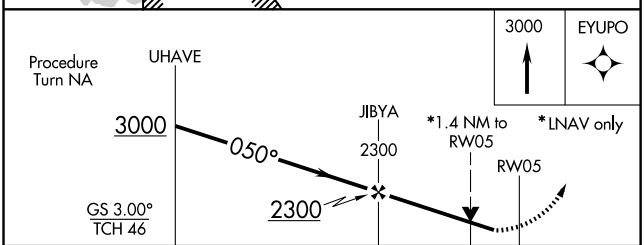
BRAINERD LAKES RGNL (BRD)

Baro-VNAV NA when using Aitkin Muni-Steve Kurtz Field altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 45°C (113°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Procedure NA when R-4301 is active. When local altimeter setting not received, use Aitkin Muni-Steve Kurtz Field altimeter setting and increase all DA 52 feet and all MDA 60 feet, increase LPV and LNAV/VNAV visibility ¼ mile all Cats, and LNAV Cats C and D visibility ¼ mile. VDP NA with Aitkin Muni-Steve Kurtz Field altimeter setting.

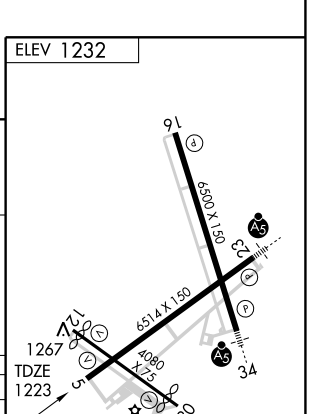
MISSED APPROACH: Climb to 3000 direct EYUPO and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	118.05 239.0	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1423-¾ 200 (200-¾)			
LNAV/VNAV DA	1776-2 553 (600-2)			
LNAV MDA	1700-1 477 (500-1)		1700-1¼ 477 (500-1¼)	1700-1½ 477 (500-1½)
CIRCLING	1760-1 528 (600-1)		1760-1½ 528 (600-1½)	1800-2 568 (600-2)



HIRL Rwys 5-23 and 16-34 L
MIRL Rwy 12-30 L
REIL Rwys 5, 16, and 30 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS CH 56518 W12A	APP CRS 123°	Rwy Idg 3560 TDZE 1225 Apt Elev 1232

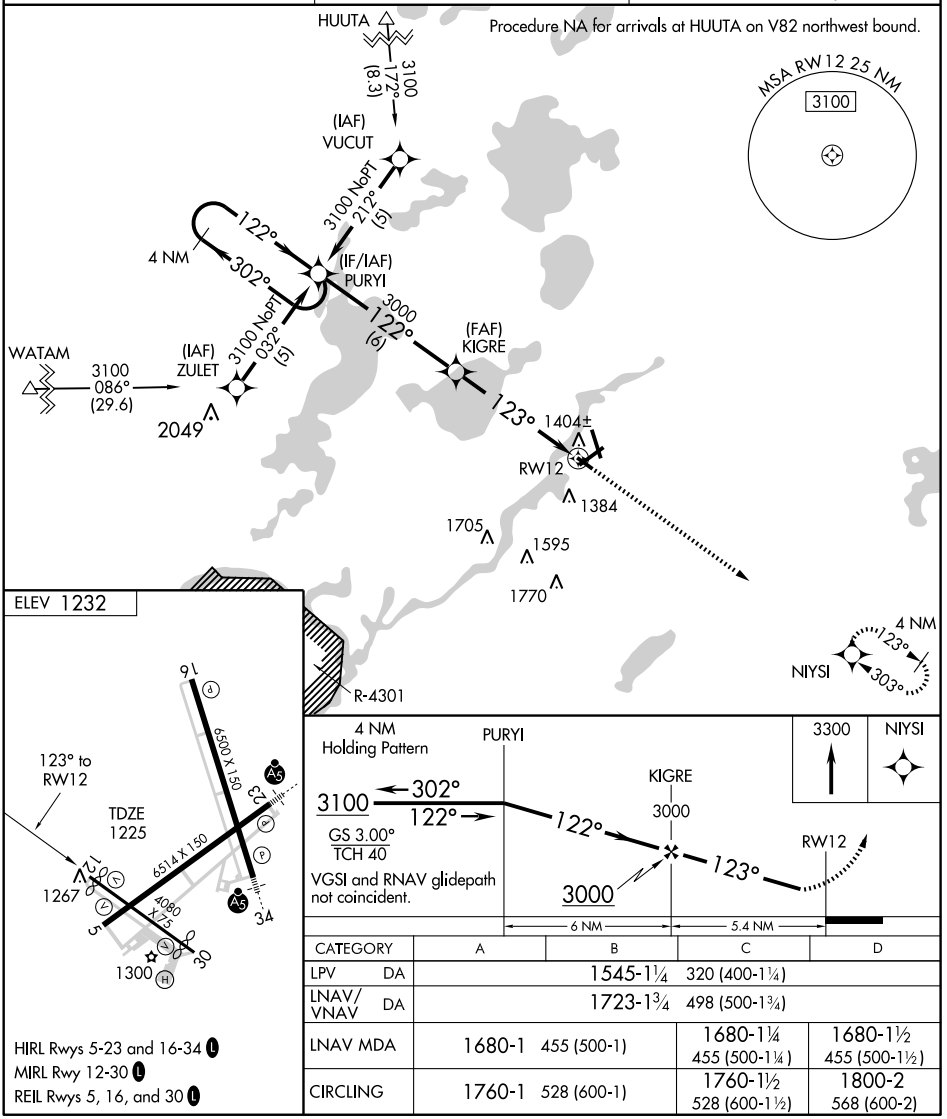
RNAV (GPS) RWY 12

BRAINERD LAKES RGNL (BRD)

When VGSI inop, procedure NA at night.
Baro-VNAV NA when using Aitkin Muni-Steve Kurtz field altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Aitkin Muni-Steve Kurtz Field altimeter setting and increase all DA 52 feet and all MDA 60 feet, increase LNAV/VNAV visibility ¼ mile all Cats, and LNAV Cats C and D visibility ¼ mile.

MISSED APPROACH: Climb to 3300 direct NIYSI and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	118.05 239.0	122.7 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1545-1¼ 320 (400-1¼)			
LNAV/VNAV DA	1723-1¾ 498 (500-1¾)			
LNAV MDA	1680-1 455 (500-1)		1680-1¼ 455 (500-1¼)	1680-1½ 455 (500-1½)
CIRCLING	1760-1 528 (600-1)		1760-1½ 528 (600-1½)	1800-2 568 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	6514
CH 82502	231°	TDZE	1224
W23A		Apt Elev	1232

RNAV (GPS) RWY 23

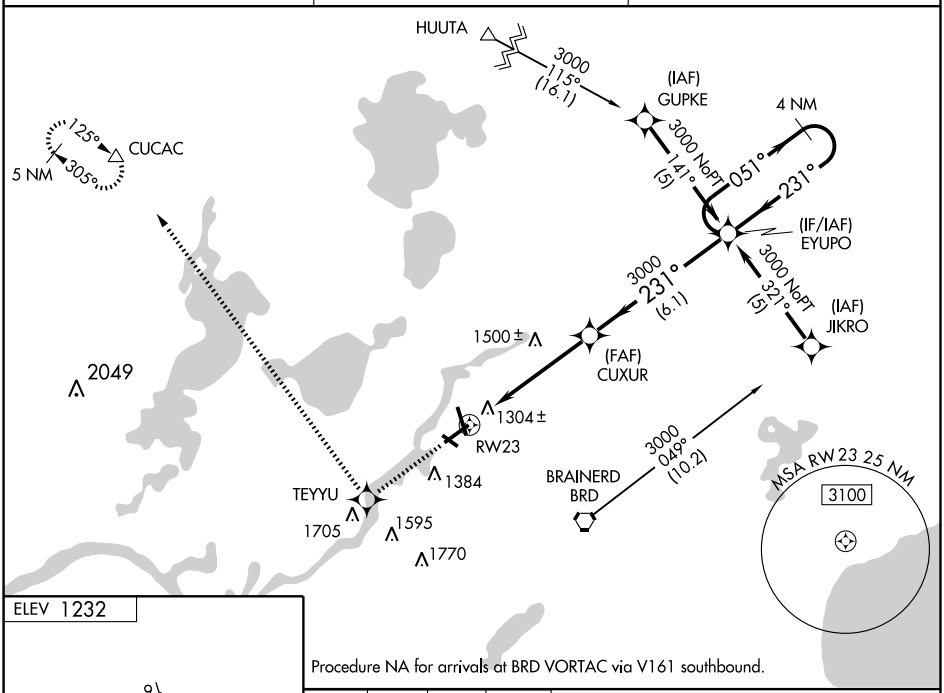
BRAINERD LAKES RGNL (BRD)

For inoperative MALSR, increase LPV all CATS visibility to 1 mile.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP -0.3 NA.
VDP and Baro-VNAV NA when using Aitkin Muni-Steve Kurtz Field altimeter setting. If local altimeter setting not received, use Aitkin Muni-Steve Kurtz Field altimeter setting and increase all DAs 52 feet and all MDAs 60 feet.

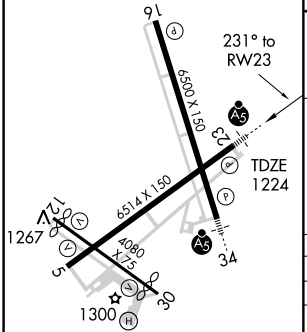
MALSR

MISSED APPROACH: Climb to 3300 direct TEYYU and via 321° track to CUCAC and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	118.05 239.0	122.7 (CTAF) L

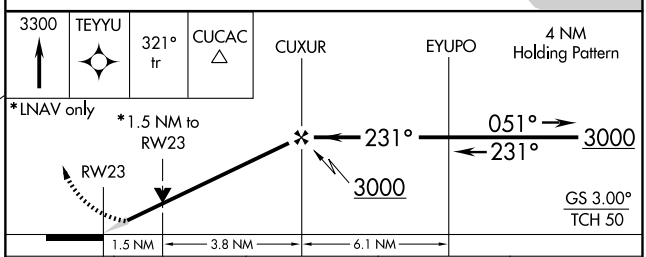


ELEV 1232



HIRL Rwy 5-23 and 16-34 L
MIRL Rwy 12-30 L
REIL Rwys 5, 16, and 30 L

Procedure NA for arrivals at BRD VORTAC via V161 southbound.



CATEGORY	A	B	C	D
LPV DA	1501-½ 277 (300-½)			
LNAV/VNAV DA	1573-¾ 349 (400-¾)			
LNAV MDA	1760-½ 536 (600-½)		1760-1 536 (600-1)	1760-1¼ 536 (600-1¼)
CIRCLING	1760-1 528 (600-1)		1760-1½ 528 (600-1½)	1800-2 568 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	3509
CH 87018	303°	TDZE	1225
W30A		Apt Elev	1232

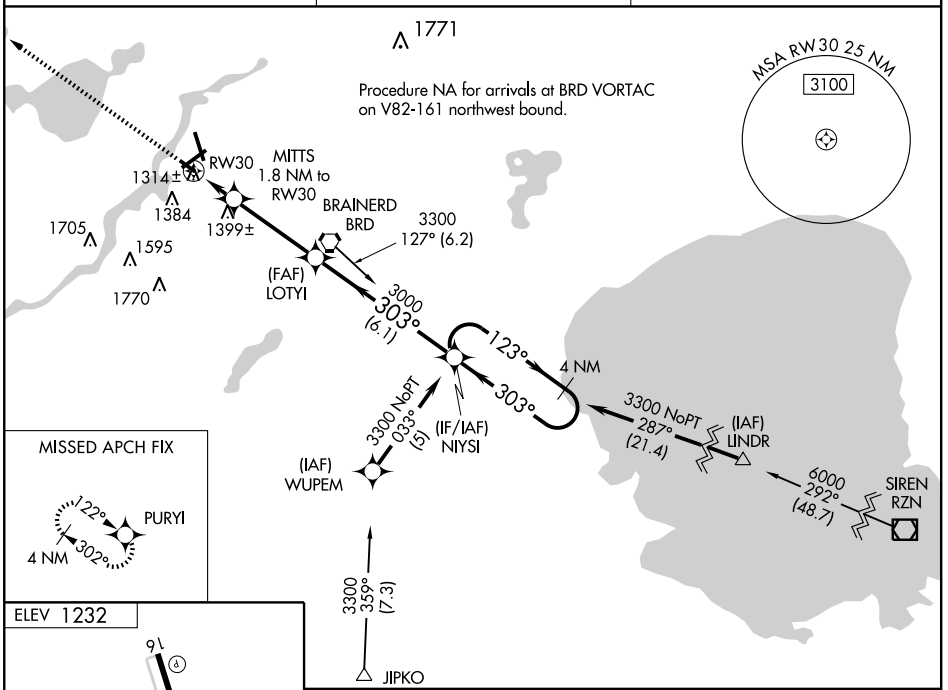
RNAV (GPS) RWY 30

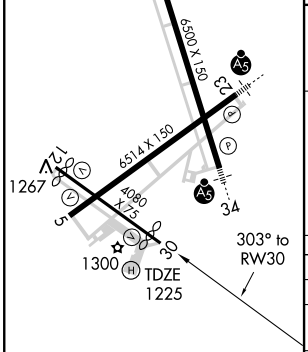
BRAINERD LAKES RGNL (BRD)

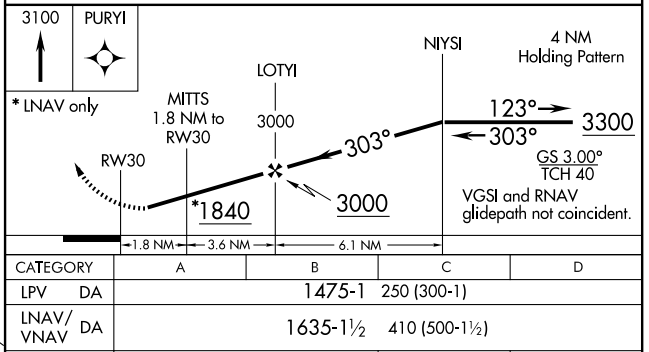
When VGSI inop, procedure NA at night. Baro-VNAV NA when using Aitkin Muni-Steve Kurtz Field altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Aitkin Muni-Steve Kurtz Field altimeter setting and increase all DA 52 feet and all MDA 60 feet, increase LNAV/VNAV visibility ¼ mile all Cats.

MISSED APPROACH: Climb to 3100 direct PURYI and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	118.05 239.0	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1475-1 250 (300-1)			
LNAV/VNAV DA	1635-1½ 410 (500-1½)			
LNAV MDA	1660-1 435 (500-1)		1660-1¼ 435 (500-1¼)	1660-1½ 435 (500-1½)
CIRCLING	1760-1 528 (600-1)		1760-1½ 528 (600-1½)	1800-2 568 (600-2)

HIRL Rwys 5-23 and 16-34 L
MIRL Rwy 12-30 L
REIL Rwys 5, 16, and 30 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS		
CH 70711	340°	Rwy Idg	6500
W34A		TDZE	1232
		Apt Elev	1232

RNAV (GPS) RWY 34

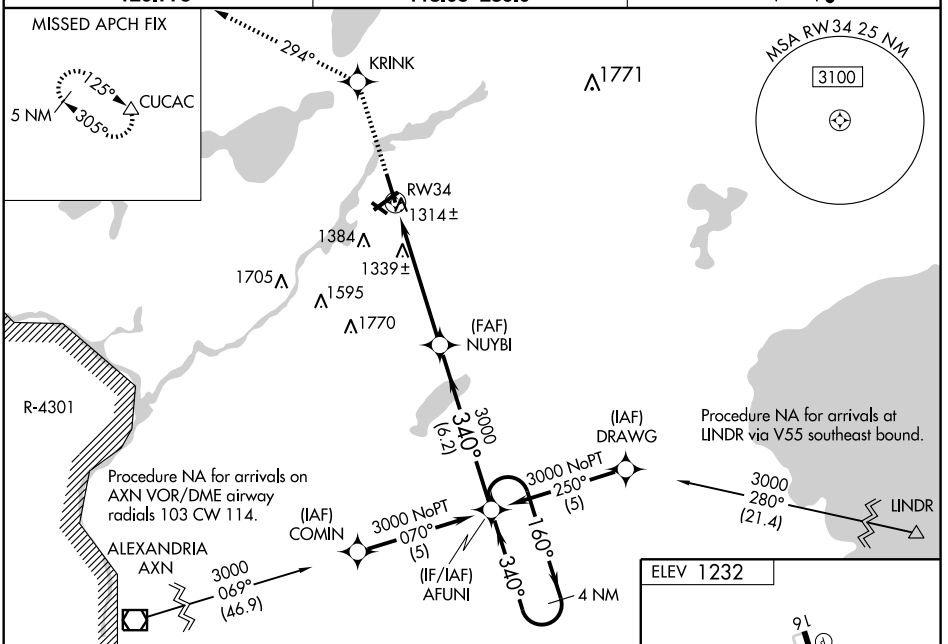
BRAINERD LAKES RGNL (BRD)

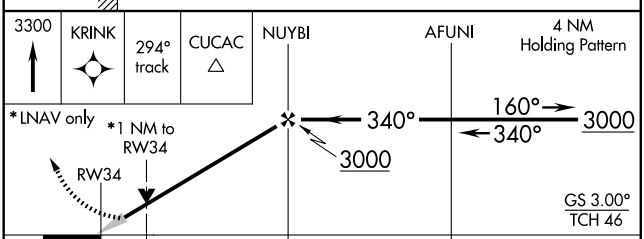
For inoperative MALSR, increase LNAV Cat D visibility to 1¼ mile.
Baro-VNAV NA when using Aitkin altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Aitkin altimeter setting and increase all DA 52 feet and all MDA 60 feet, increase LNAV/VNAV all Cats and LNAV Cat C and D visibility ¼ mile. VDP NA when using Aitkin altimeter setting.
For inoperative MALSR when using Aitkin altimeter setting, increase LNAV Cat D visibility to 1½ mile.

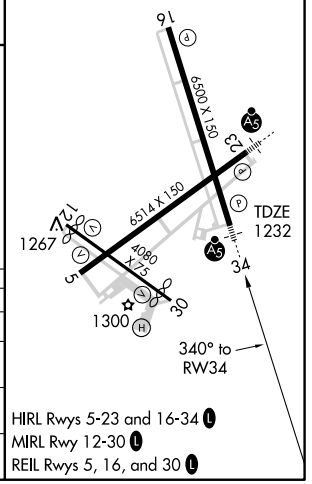
MALSR

MISSED APPROACH: Climb to 3300 direct KRINK and via 294° track to CUCAC and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.775	118.05 239.0	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1432-½ 200 (200-½)			
LNAV/VNAV DA	1584-¾ 352 (400-¾)			
LNAV MDA	1600-½ 368 (400-½)			1600-1 368 (400-1)
CIRCLING	1760-1 528 (600-1)		1760-1½ 528 (600-1½)	1800-2 568 (600-2)

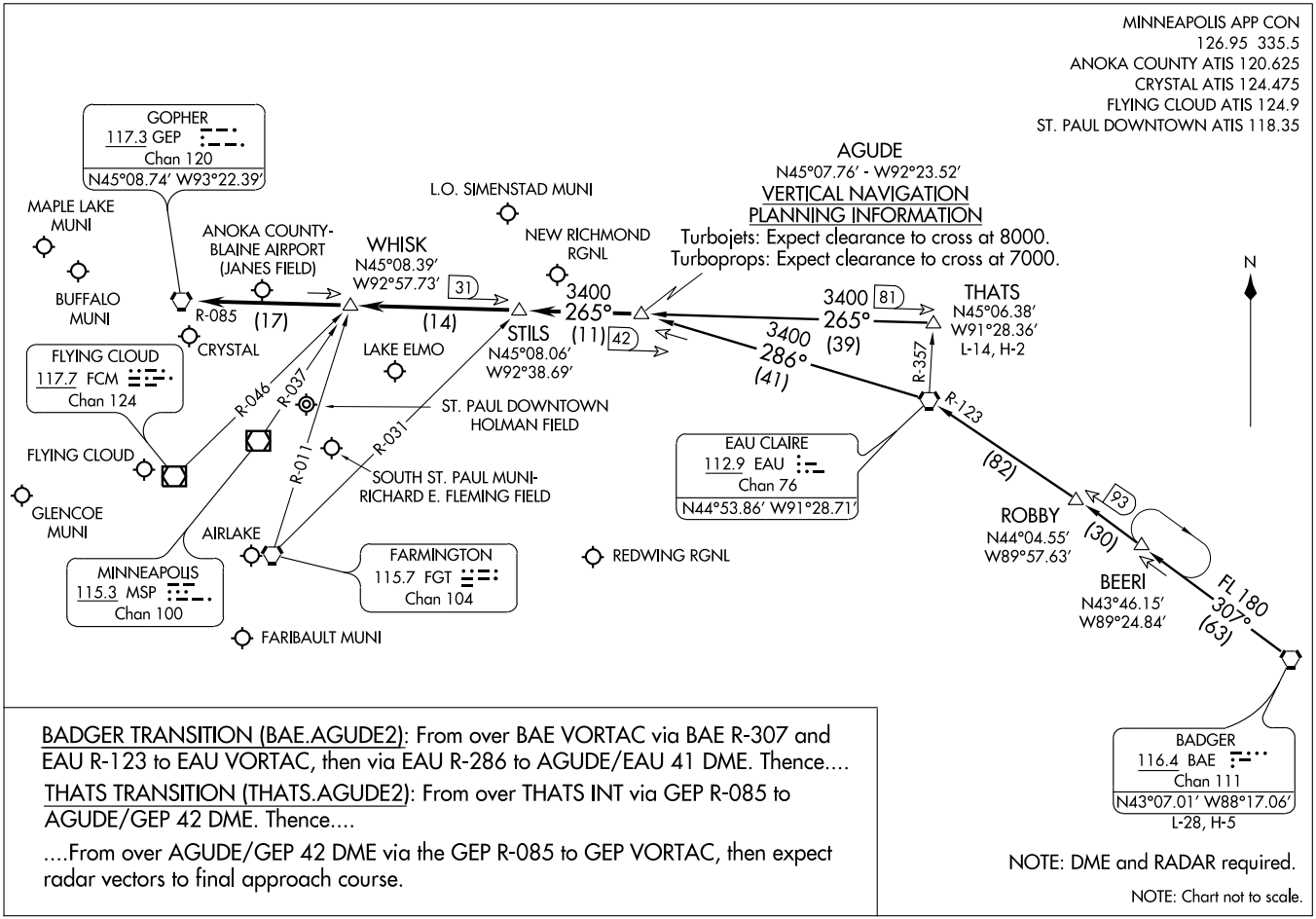
HIRL Rwys 5-23 and 16-34 L
MIRL Rwy 12-30 L
REIL Rwys 5, 16, and 30 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

AGUDE TWO ARRIVAL

(AGUDE.AGUDE2) 10154

MINNEAPOLIS-ST. PAUL, MINNESOTA



BADGER TRANSITION (BAE.AGUDE2): From over BAE VORTAC via BAE R-307 and EAU R-123 to EAU VORTAC, then via EAU R-286 to AGUDE/EAU 41 DME. Thence....

THATS TRANSITION (THATS.AGUDE2): From over THATS INT via GEP R-085 to AGUDE/GEP 42 DME. Thence....

....From over AGUDE/GEP 42 DME via the GEP R-085 to GEP VORTAC, then expect radar vectors to final approach course.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

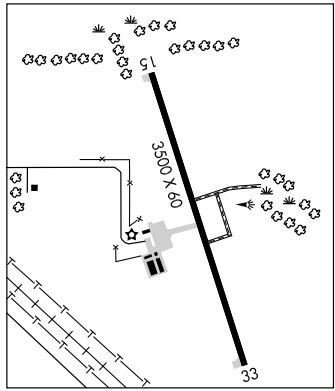
(AGUDE.AGUDE2) 10154

AGUDE TWO ARRIVAL

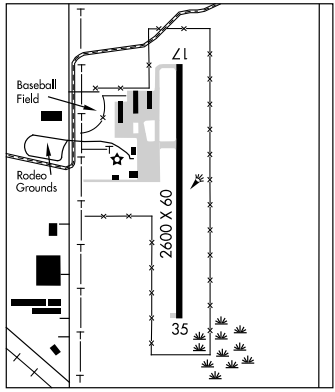
ST-263 (FAA)

MINNEAPOLIS-ST. PAUL, MINNESOTA

BROOTEN MUNI (6D1) 1 SE UTC−6(−5DT) N45°30.00′ W95°06.77′ TWIN CITIES L–14H
1305 B NOTAM FILE PNM
RWY 15–33: H3500X60 (ASPH) LIRL
RWY 15: Trees. **RWY 33:** Tree.
AIRPORT REMARKS: Unattended. Ultralights on and invof arpt.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE AXN.
ALEXANDRIA (L) VORW/DME 112.8 AXN Chan 75 N45°57.50′ W95°13.96′ 163° 28.0 NM to fld. 1367/7E. **HIWAS.**



BUFFALO MUNI (CFE) 2 SE UTC−6(−5DT) N45°09.54′ W93°50.60′ TWIN CITIES L–12I, 14H, A IAP
967 B S4 **FUEL** 100LL TPA—1797(830) NOTAM FILE CFE
RWY 17–35: H2600X60 (ASPH) LIRL (NSTD) 0.5% up N
RWY 17: Pole. **RWY 35:** Trees.
AIRPORT REMARKS: Attended dalgt hrs. Fuel avbl 24 hrs with credit card. Ultralight tfc on and invof arpt. Rwy 17 and Rwy 35 NSTD LIRL.
WEATHER DATA SOURCES: AWOS–3 120.45 (763) 684–0762.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS APP/DEP CON** 126.5
GCO 121.725 (MINNEAPOLIS CLNC and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
GOPHER (H) VORTACW 117.3 GEP Chan 120 N45°08.74′ W93°22.39′ 266° 20.0 NM to fld. 877/6E. **HIWAS.**



BUNAN N47°26.70′ W94°50.10′ NOTAM FILE BJI. TWIN CITIES
NDB (LOM) 371 MD 310° 5.6 NM to Bemidji Rgnl. Unmonitored.

VORTAC GEP 117.3 Chan 120	APP CRS 266°	Rwy Idg N/A TDZE N/A Apt Elev 967

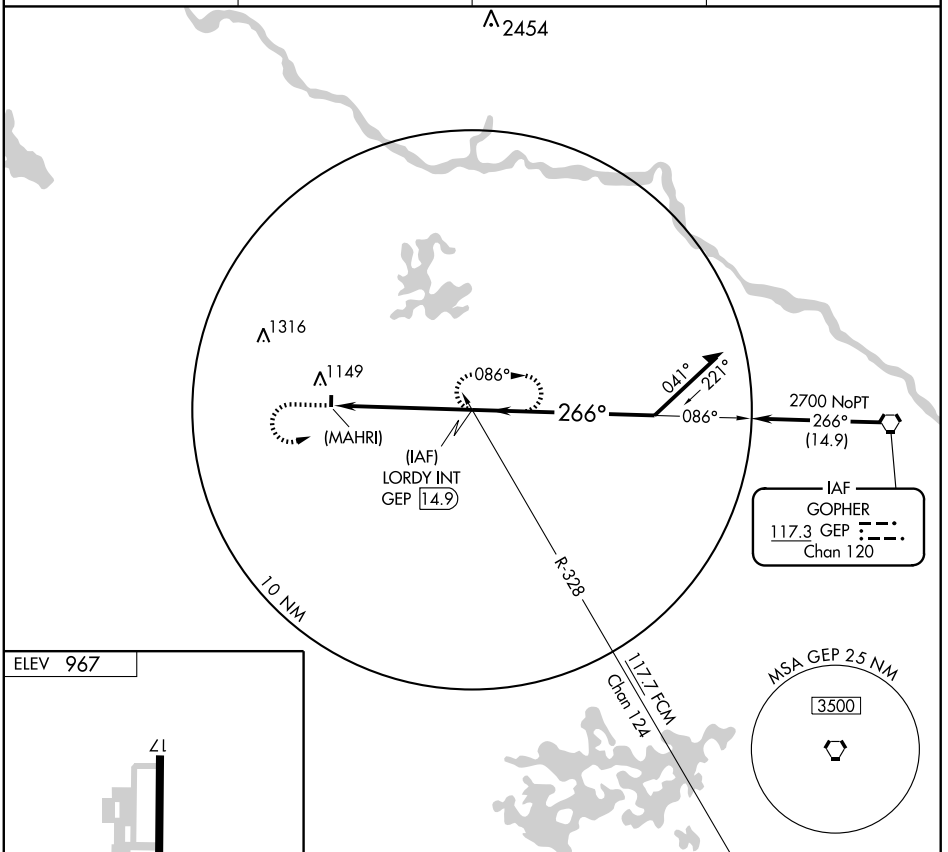
VOR or GPS-B
BUFFALO MUNI (CFE)

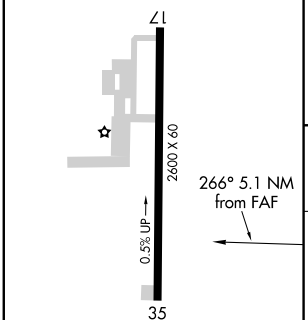
NA

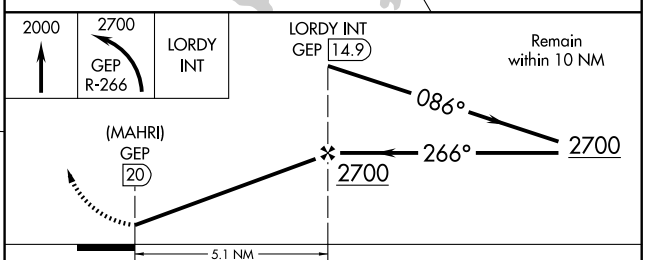
Use Princeton altimeter setting.

MISSED APPROACH: Climb to 2000 then climbing left turn to 2700 via GEP R-266 to LORDY INT and hold.

AWOS-3	MINNEAPOLIS APP CON	GCO	UNICOM
120.45	126.5 357.4	121.725	122.8 (CTAF)







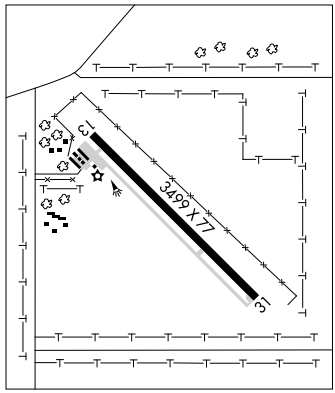
FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

CATEGORY	A	B	C	D
CIRCLING	1560-1	593 (600-1)	1560-1½ 593 (600-1½)	NA

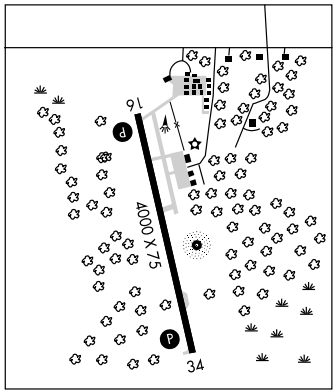
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

CALEDONIA

HOUSTON CO (CHU) 3 S UTC−6(−5DT) N43°35.78′ W91°30.24′ **CHICAGO**
1179 B **FUEL** 100LL NOTAM FILE PNM **L–28G**
RWY 13–31: H3499X77 (ASPH) S–10 MIRL **IAP**
AIRPORT REMARKS: Unattended. Fuel 24hr credit card svc avbl. Rwy 13–31 alligator cracking, loose aggregate. No hold line at Rwy 31. Turf twy rutted. ACTIVATE MIRL Rwy 13–31—CTAF.
COMMUNICATIONS: CTAF 122.9
NODINE RCO 122.1R 117.9T (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 128.6
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
NODINE (H) VORTAC 117.9 ODI Chan 126 N43°54.74′ W91°28.05′ 184° 19 NM to fld. 1282/1E.



CAMBRIDGE MUNI (CBG) 2 SW UTC−6(−5DT) N45°33.45′ W93°15.85′ **TWIN CITIES**
945 B S4 **FUEL** 100LL NOTAM FILE CBG **L–14I**
RWY 16–34: H4000X75 (ASPH) S–19 MIRL **IAP**
RWY 16: PAPI(P4R)—GA 3.0° TCH 40′.
RWY 34: REIL. PAPI(P4L)—GA 3.0° TCH 40′. Trees.
AIRPORT REMARKS: Unattended. Self service fuel avbl with credit card. Migratory waterfowl and deer on and invof arpt. For Noise Abatement, acft departing Rwy 16 fly rwy heading to 1945′ MSL (1000′AGL) and 2 NM before left turn. ACTIVATE MIRL Rwy 16–34, PAPI Rwy 16 and Rwy 34 and REIL Rwy 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 121.125 (763) 689–9562.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 121.05
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
GOPHER (H) VORTACW 117.3 GEP Chan 120 N45°08.74′ W93°22.39′ 005° 25.1 NM to fld. 877/6E. **HIWAS.**
NDB (MHW) 350 CBG N45°33.45′ W93°15.73′ at fld. NOTAM FILE CBG.



CAMP RIPLEY (See RAY S MILLER AAF)

APP CRS	Rwy Idg	3499
314°	TDZE	1179
	Apt Elev	1179

GPS RWY 31

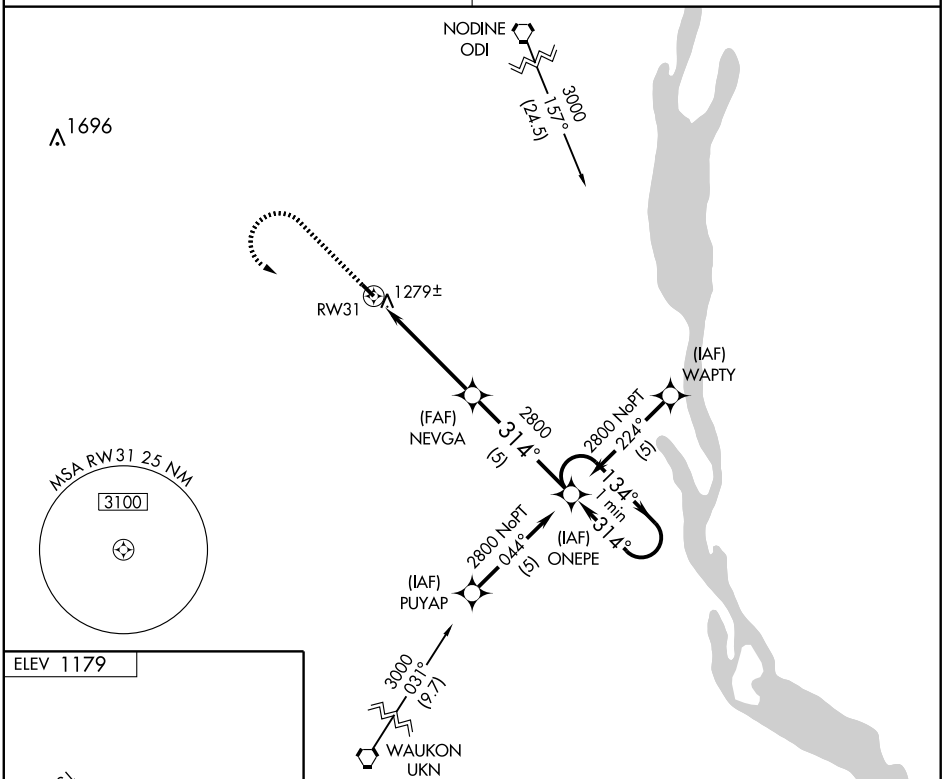
CALEDONIA/HOUSTON COUNTY (CHU)

NA

Use La Crosse, WI altimeter setting.

MISSED APPROACH: Climb to 2500 then climbing left turn to 2800 direct ONEPE WP and hold.

MINNEAPOLIS CENTER	CTAF
128.6 363.0	122.9 L



CATEGORY	A	B	C	D
S-31	1660-1	481 (500-1)	1660-1¼ 481 (500-1¼)	NA
CIRCLING	1820-1	641 (700-1)	1820-1¾ 641 (700-1¾)	NA

MIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

VORTAC ODI 117.9 Chan 126	APP CRS 184°	Rwy Idg N/A TDZE N/A Apt Elev 1179

VOR/DME or GPS-A

CALEDONIA/HOUSTON COUNTY (CHU)

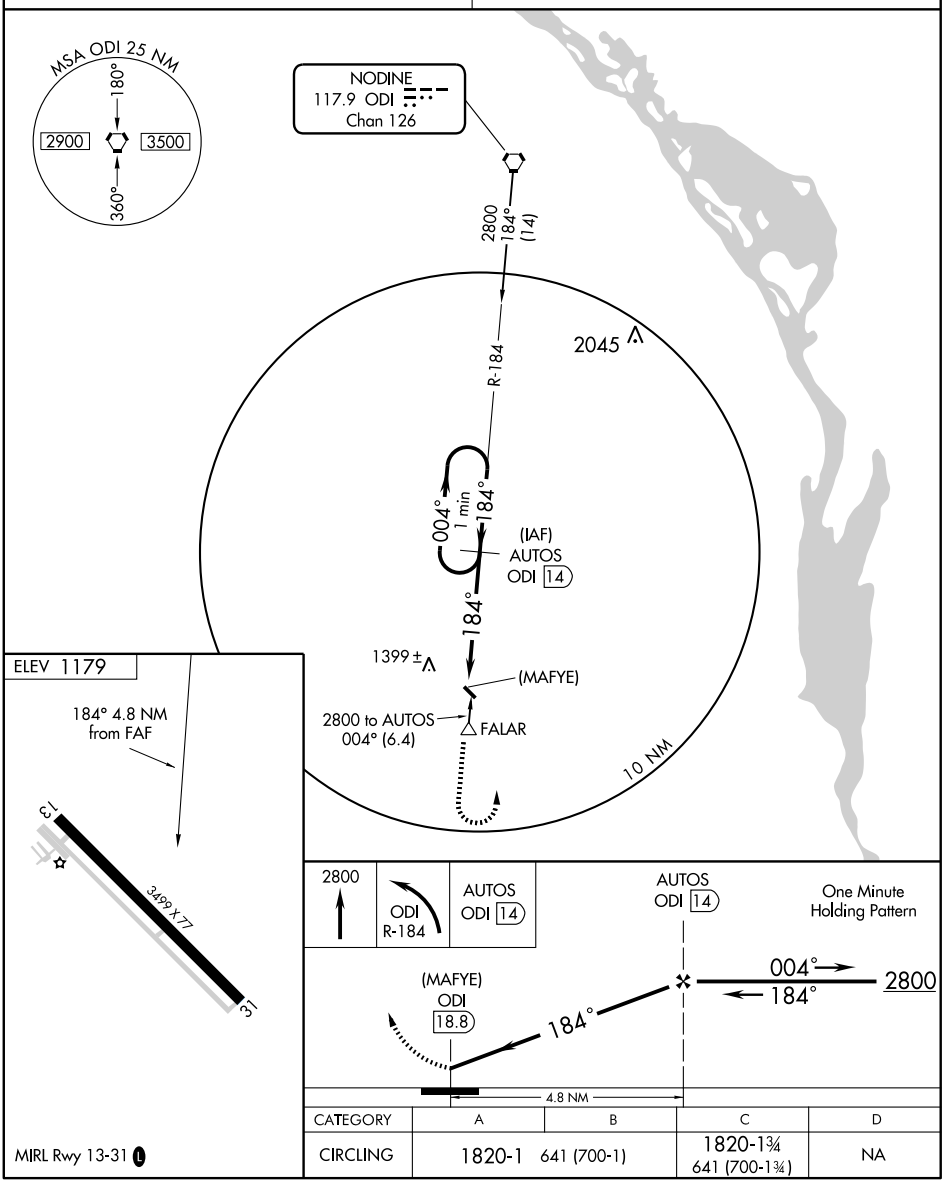
NA

Use La Crosse, WI altimeter setting.

MISSED APPROACH: Climb to 2800 then left turn via ODI R-184 to AUTOS/14 DME and hold.

MINNEAPOLIS CENTER
128.6 363.0

CTAF
122.9 L



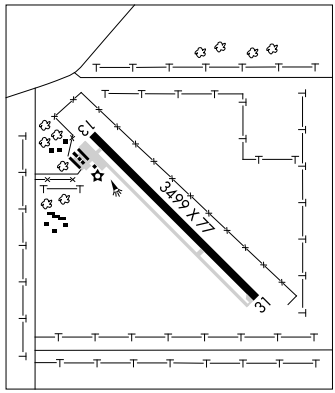
CATEGORY	A	B	C	D
CIRCLING	1820-1	641 (700-1)	1820-1¾ 641 (700-1¾)	NA

MIRL Rwy 13-31 L

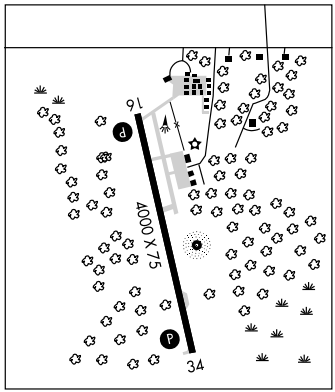
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

CALEDONIA

HOUSTON CO (CHU) 3 S UTC−6(−5DT) N43°35.78′ W91°30.24′ **CHICAGO**
1179 B **FUEL** 100LL NOTAM FILE PNM **L–28G**
RWY 13–31: H3499X77 (ASPH) S–10 MIRL **IAP**
AIRPORT REMARKS: Unattended. Fuel 24hr credit card svc avbl. Rwy 13–31 alligator cracking, loose aggregate. No hold line at Rwy 31. Turf twy rutted. ACTIVATE MIRL Rwy 13–31—CTAF.
COMMUNICATIONS: CTAF 122.9
NODINE RCO 122.1R 117.9T (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 128.6
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
NODINE (H) VORTAC 117.9 ODI Chan 126 N43°54.74′ W91°28.05′ 184° 19 NM to fld. 1282/1E.



CAMBRIDGE MUNI (CBG) 2 SW UTC−6(−5DT) N45°33.45′ W93°15.85′ **TWIN CITIES**
945 B S4 **FUEL** 100LL NOTAM FILE CBG **L–14I**
RWY 16–34: H4000X75 (ASPH) S–19 MIRL **IAP**
RWY 16: PAPI(P4R)—GA 3.0° TCH 40′.
RWY 34: REIL. PAPI(P4L)—GA 3.0° TCH 40′. Trees.
AIRPORT REMARKS: Unattended. Self service fuel avbl with credit card. Migratory waterfowl and deer on and invof arpt. For Noise Abatement, acft departing Rwy 16 fly rwy heading to 1945′ MSL (1000′AGL) and 2 NM before left turn. ACTIVATE MIRL Rwy 16–34, PAPI Rwy 16 and Rwy 34 and REIL Rwy 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 121.125 (763) 689–9562.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 121.05
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
GOPHER (H) VORTACW 117.3 GEP Chan 120 N45°08.74′ W93°22.39′ 005° 25.1 NM to fld. 877/6E. **HIWAS.**
NDB (MHW) 350 CBG N45°33.45′ W93°15.73′ at fld. NOTAM FILE CBG.



CAMP RIPLEY (See RAY S MILLER AAF)

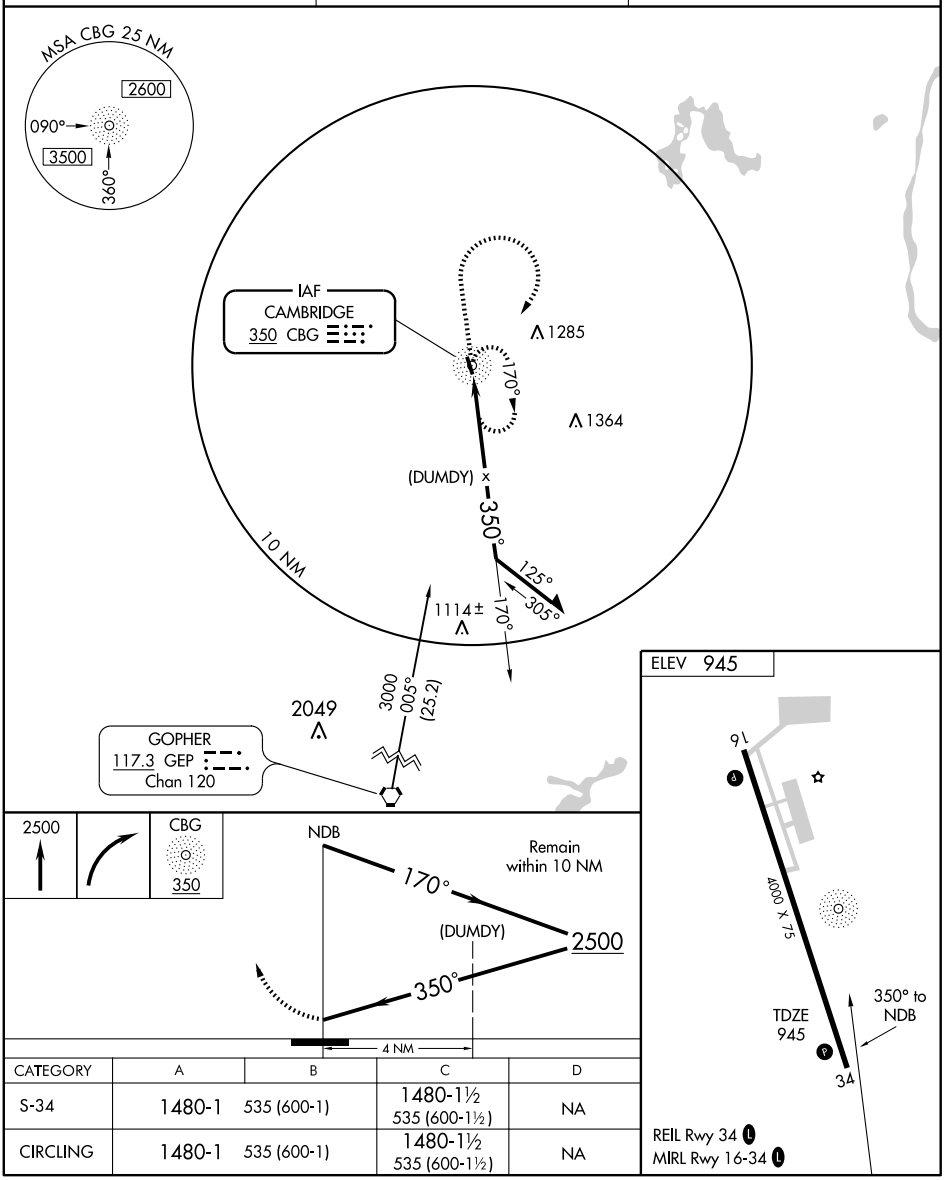
NDB CBG	APP CRS	Rwy Idg	4000
350	350°	TDZE	945
		Apt Elev	945

NDB or GPS RWY 34
CAMBRIDGE MUNI (CBG)

NA

MISSED APPROACH: Climb to 2500 then right turn direct CBG NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
121.125	121.05 397.9	122.8 (CTAF) L



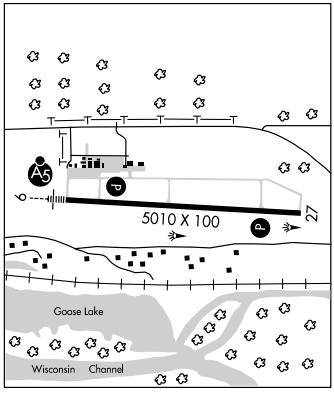
CATEGORY	A	B	C	D
S-34	1480-1	535 (600-1)	1480-1½ 535 (600-1½)	NA
CIRCLING	1480-1	535 (600-1)	1480-1½ 535 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RAY S MILLER AAF (CAMP RIPLEY) (RYM) ARNG 1 NW UTC−6(−5DT) **TWIN CITIES**
N46°05.48′ W94°21.63′ **H–2J, L–14H**
1150 NOTAM FILE RYM Not insp. **DIAP**
RWY 13–31: H6100X100 (ASPH) PCN 27 F/A/W/T HIRL
RWY 31: MALSF.
RWY 132–312: 3500X80 (GRVL)
MILITARY SERVICE: LGT HIRL Rwy 13–31 opr low ints, to increase ints ACTIVATE—126.2 MALSF Rwy 31 opr when HIRL reach step 3. **FUEL** J8
MILITARY REMARKS: Opr 1400–2130Z‡, other times 48 hr prior notice rqr. **RSTD** PPR. Base OPS DSN 871–2781/2779/2780, C320–616–2781/2779/2780. **CAUTION** Rwy edge lgts positioned 25′ from usable rwy sfc. **NS ABTMT** Procedure in effect. **MISC** Winds are estimated due to FMQ–13 wind sensors being accurate to within only +/−4 Kts. ATC/Wx will not include/relay wind correction into forecast phraseology. Therefore, aircrews will incorporate a +/−4 Kts accuracy into their decision making process for flying opr. Parking area capacity designated for 3 C130 acft simultaneously. Assault Strip marking center 3500′ of rwy, 750′ ovrn both ends. Ctc Base OPS for Assault Strip lgt.
WEATHER DATA SOURCES: AWOS–3 148.35 360.25 (C320) 632–7500.
COMMUNICATIONS:
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 118.05 239.0
MILLER TOWER 126.2 254.4 49.20 Mon–Fri 1400Z‡–2200Z‡, for NSTD hrs check NOTAMS. **CLNC DEL** 126.2
MILLER OPS 49.65 **RANGE CONTROL** 304.3 36.1
AIRSPACE: CLASS D Mon–Fri 1400Z‡–2200Z‡, for NSTD hrs check NOTAMS, other times CLASS E.
RADIO AIDS TO NAVIGATION: NOTAM FILE BRD.
BRAINERD (H) VORTACW 116.9 BRD Chan 116 N46°20.89′ W94°01.55′ 219° 20.8 NM to fld. 1260/3E.
CAMP RIPLEY (T) TACAN Chan 48 RYM (111.1) N46°05.46′ W94°21.28′ at fld. 1149/3E. NOTAM FILE PNM. Unmonitored when Miller OPS clsd. Other times 48 hr prior notice rqr.
RIPLEY NDB (MHW) 404 XCR N46°04.75′ W94°20.61′ at fld. NOTAM FILE PNM.
ILS/DME 111.1 I–RYM Chan 48 Rwy 31. Class IE. GS unusable for coupled approaches blo 1660′ MSL. Unmonitored when Miller OPS clsd.

RED LAKE FALLS MUNI (D81) 3 S UTC−6(−5DT) N47°49.50′ W96°15.47′ **TWIN CITIES**
1061 B NOTAM FILE PNM
RWY 15–33: H2500X60 (ASPH) LIRL (NSTD)
RWY 15: Sign.
AIRPORT REMARKS: Unattended. Ultralights on and invof arpt. Rwy 15–33 NSTD LIRL; lgts 40 feet off sides of rwy.
COMMUNICATIONS: CTAF 122.9

RED WING RGNL (RGK) 3 NE UTC−6(−5DT) N44°35.36′ W92°29.10′ **GREEN BAY**
778 B S4 **FUEL** 100LL, JET A NOTAM FILE RGK **H–2J, L–12J, 14I, A**
RWY 09–27: H5010X100 (ASPH) S–30, D–75 HIRL **IAP**
RWY 09: MALSR. PAPI(P4L)—GA 3.0° TCH 35′.
RWY 27: REIL. PAPI(P4L)—GA 3.16° TCH 30′. Trees.
AIRPORT REMARKS: Attended Mon–Sat 1400–2300Z‡, Sun 1600–2200Z‡. 24hr credit card fuel avbl. Deer on and invof arpt. For NS ABTMT procedure ctc aprt manager 651–385–3623. Red Wing Rgnl is physically located in Wisconsin. ACTIVATE HIRL Rwy 09–27, MALSR Rwy 09, REIL Rwy 27, PAPI Rwy 09 and Rwy 27—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.25 (715) 594–3763.
COMMUNICATIONS: CTAF/UNICOM 123.05
RED WING RCO 122.6 (GREEN BAY RADIO)
Ⓡ **MINNEAPOLIS APP/DEP CON** 121.2
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
FARMINGTON (H) VORTAC 115.7 FGT Chan 104 N44°37.86′ W93°10.92′ 089° 30.0 NM to fld. 972/6E.
REGUE NDB (LOM) 274 RG N44°35.87′ W92°38.85′ 092° 7 NM to fld.
ILS 110.1 I–RGK Rwy 09 LOM REGUE NDB.



REDWOOD FALLS N44°28.04′ W95°07.69′ NOTAM FILE RWF. **TWIN CITIES**
(H) VORW/DME 113.3 RWF Chan 80 016° 5.2 NM to Redwood Falls Muni. 1061/7E. **HIWAS.** **H–2H, L–12I**
RCO 122.4 (PRINCETON RADIO)

ILS or LOC/DME RWY 31

LOC I-RYM	APCH CRS	Rwy Idg 6100 TDZE 1149 Arpt Elev 1152
111.1	312°	

AL-5226 [USA]

RAY S. MILLER AAF (KRYM)

▼ NA

* When ALS inop, increase CAT D vis ¼ mile.

MALSF

MISSED APPROACH: Climb to 2000, then climbing left turn to 3300 direct XCR NDB and hold. (TACAN equipped acft climb to 2000, then climbing left turn to 4200 via RYM R-220 to GARYE 15 DME and hold).

MINNEAPOLIS CENTER	MILLER TOWER ★	CLNC DEL	AWOS-3
118.05 239.0	254.4 126.2 (L) 49.2	126.2	148.35

ADF or TACAN REQUIRED

R-4301

Procedure NA when R-4301 is active.

BRAINERD

7000 216°- (20.9)

To XCR

MSA RYM 25 NM

3300

1674

1708

1419

1639

CAMP RIPLEY Chan 48 RYM

RIPLEY 404 XCR

R-080

3200

(IAF) RUSEE RYM 15

LOCALIZER 111.1 I-RYM

132°

5000 132° from XCR (5.7)

1299

5000 133° from RYM (6.6)

1644

When local altimeter setting not received, use Little Falls altimeter setting and increase DA to 1373, increase all MDAs 40 ft and S-LOC 31 CAT D vis by ¼ mile.

1570

1494

(IAF) PEGGO RYM 6.6

1680

1557

087°

267°

3200 No PT RYM 15 Arc

LR-125

312°

TODEE RYM 15

3200

(IAF) GARYE RYM 15

3200

R-220

GS unusable for coupled approaches below 1660 ft. MSL.

10 NM

LR-141

132°

040°

220°

RYM

3200 No PT RYM 15 Arc

22

ELEV 1152

2000	3300	XCR

PEGGO RYM 6.6

Remain within 10 NM

5000

132°

3128

3300

TACAN

4

312°

312°

3200

GS 3.00°

TCH 38

6.2 NM

13

132°

6100 x 100

3500 x 80

TDZE 1149

31

Assault Strip

312°

1299

312° 6.2 NM from FAF

CATEGORY	A	B	C	D
S-ILS 31	1349-¾ 200 (200-¾)			
S-LOC 31 *	1580-¾ 431 (500-¾)		1580-1 431 (500-1)	1580-1¼ 431 (500-1¼)
CIRCLING	1620-1 468 (500-1)	1640-1 488 (500-1)	1640-1½ 488 (500-1½)	1720-2 568 (600-2)

HIRL Rwy 13-31 (L)

NC-1, 21 OCT 2010 to 18 NOV 2010

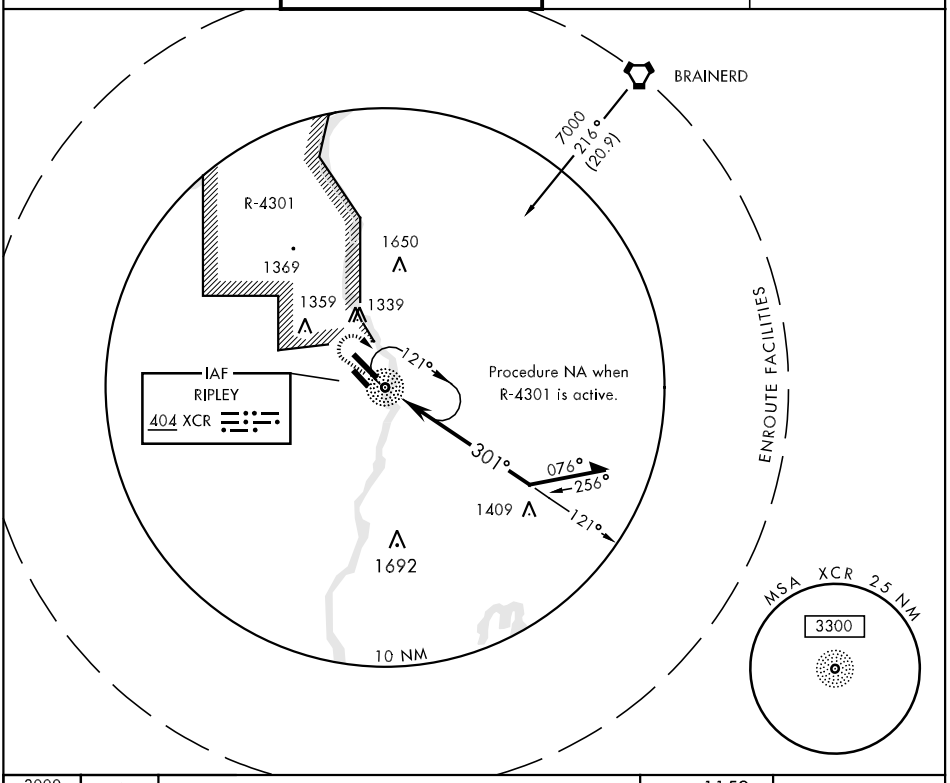
NC-1, 21 OCT 2010 to 18 NOV 2010

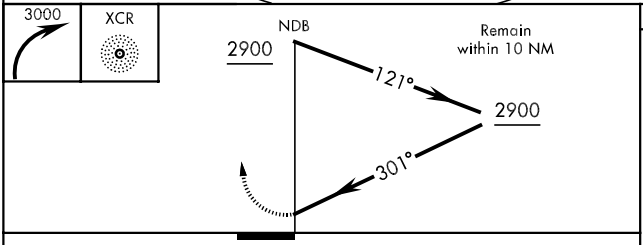
NDB RWY 31

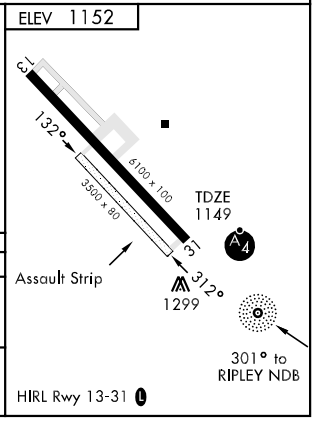
NDB XCR 404	APCH CRS 301°	Rwy Idg 6100 TDZE 1149 Arpt Elev 1152	AL-5226 [USA]	RAY S. MILLER AAF (KRYM)

T A NA	When local altimeter setting not received, use Little Falls altimeter setting and increase all MDA 40'. Inop table does not apply to CAT C.	MALSF	MISSED APPROACH: Climbing right turn to 3000 in XCR NDB holding pattern.

MINNEAPOLIS CENTER	MILLER TOWER ★	CLNC DEL	AWOS-3
118.05 239.0	126.2 L 254.4 49.2	126.2	148.35







CATEGORY	A	B	C	D
S-31	1760-¾ 611 (700-¾)		1760-1¾ 611 (700-1¾)	1760-2 611 (700-2)
CIRCLING	1760-1 608 (700-1)		1760-1¾ 608 (700-1¾)	1760-2 608 (700-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 13

APCH CRS	Rwy ldg	6100
132°	TDZE	1152
	Arpt Elev	1152

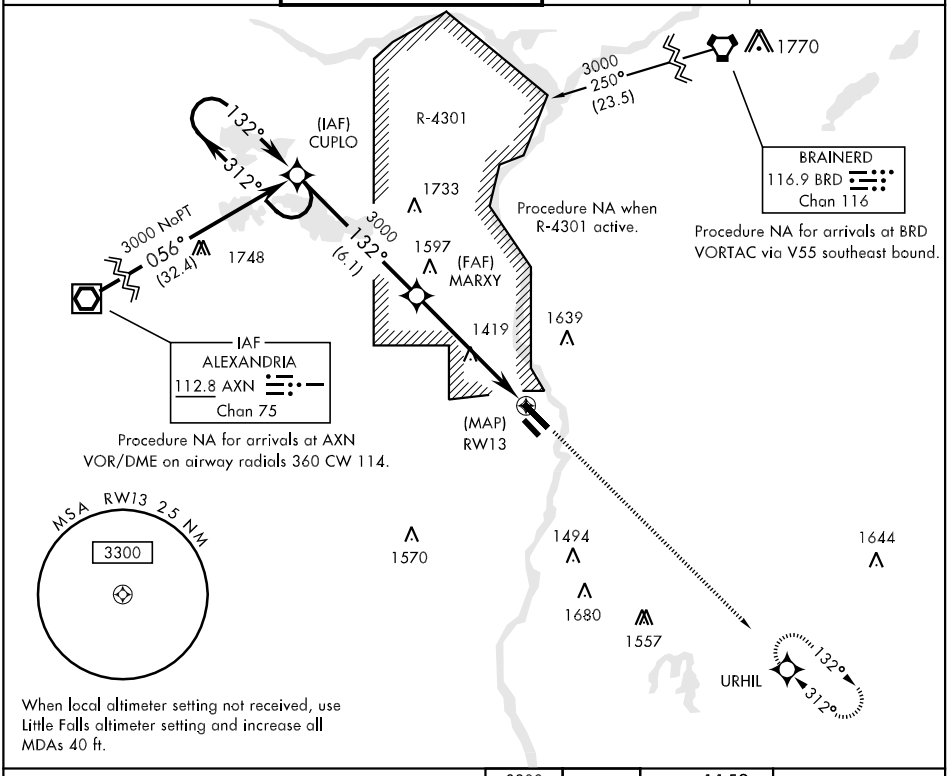
AL-5226 [USA]

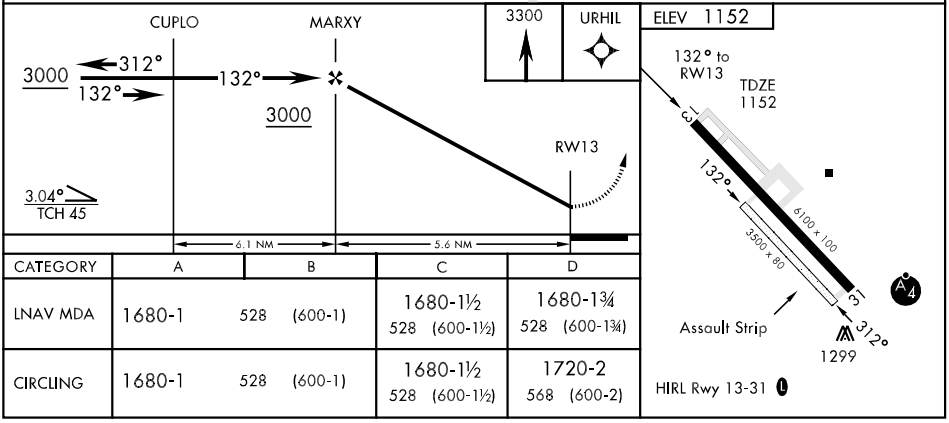
RAY S. MILLER AAF (KRYM)

NA — DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3300 direct URHIL and hold.

MINNEAPOLIS CENTER	MILLER TOWER ★	CLNC DEL	AWOS-3
118.05 239.0	254.4 126.2 (L) 49.2	126.2	148.35





CATEGORY	A	B	C	D
LNAV MDA	1680-1	528 (600-1)	1680-1½ 528 (600-1½)	1680-1¾ 528 (600-1¾)
CIRCLING	1680-1	528 (600-1)	1680-1½ 528 (600-1½)	1720-2 568 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APCH CRS 312°

Rwy Idg 6100
TDZE 1149
Arpt Elev 1152

AL-5226 [USA]

NA

* When ALS inop, increase CAT D vis ¼ mile.

DME/DME RNP-0.3 NA.

MALS

MISSED APPROACH: Climbing right turn to 3300 direct URHIL WPT and hold.

MINNEAPOLIS CENTER	MILLER TOWER ★	CLNC DEL	AWOS-3
118.05 239.0	254.4 126.2 (L) 49.2	126.2	148.35

R-4301

1419

1639

When local altimeter setting not received, use Little Falls altimeter setting and increase all MDAs 40 ft.

Procedure NA when R-4301 is active.

(MAP) RW31

1299

(FAF) PEGGO

1644

(IAF) GITTI

3300

NoPT 3300

234° (8.5)

1570

1494

1680

1557

3200

312° (6.1)

(IAF) URHIL

132°

312°

MSA RW31 2.5 NM

3300

NoPT 3300

037° (15.6)

1610

3300

(IAF) INONY

3300 URHIL

VDP NA when using Little Falls altimeter setting.

URHIL

132°

312°

3300

1.2 NM to RW31

PEGGO

312°

RW31

3200

3.05°

TCH 38

6.2 NM

6.1 NM

ELEV 1152

132°

6100 x 100

3500 x 80

TDZE 1149

Assault Strip

1299

312°

312° to RW31

HIRL Rwy 13-31 (L)

CATEGORY	A	B	C	D
LNAV MDA *	1580- ¾ 431 (500- ¾)		1580-1 431 (500-1)	1580-1¼ 431 (500-1¼)
CIRCLING	1620-1 468 (500-1)	1640-1 488 (500-1)	1640-1½ 488 (500-1½)	1720-2 568 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

TACAN RWY 13

TACAN	APCH CRS	Rwy Idg	6100
Chan 48 RYM	128°	TDZE	1152
		Arpt Elev	1152

AL-5226 [USA]

RAY S. MILLER AAF (KRYM)

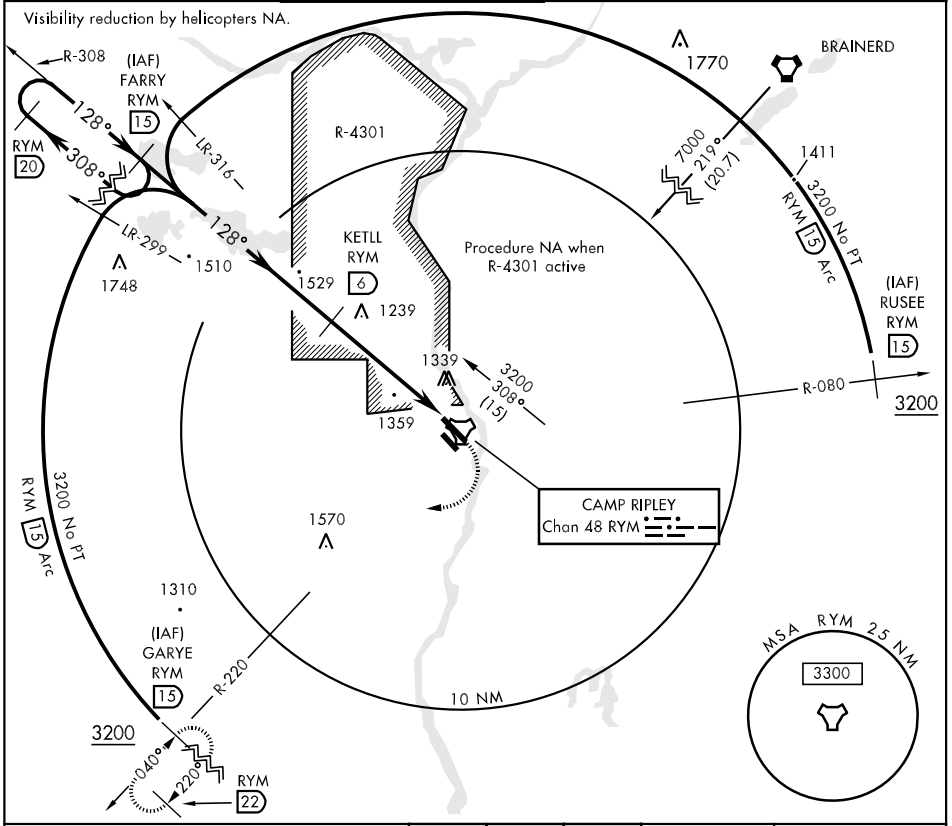
When local altimeter setting not received, use Little Falls altimeter setting and increase all MDA 40'.

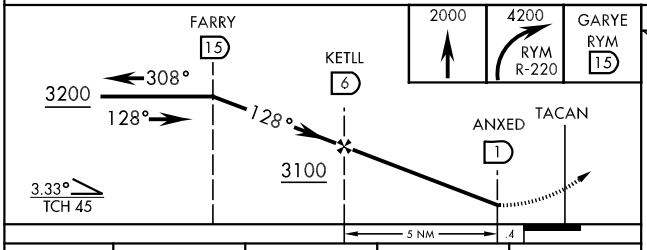
NA

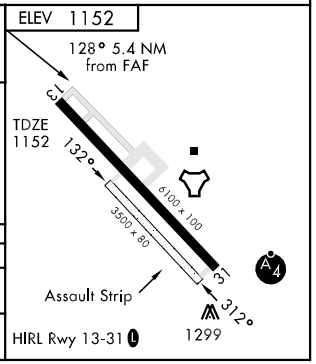
MISSED APPROACH: Climb to 2000 then climbing right turn to 4200 via RYM TACAN R-220 to GARYE (15 DME) and hold.

MINNEAPOLIS CENTER	MILLER TOWER ★	CLNC DEL	AWOS-3
118.05 239.0	126.2 (L) 254.4 49.2	126.2	148.35

Visibility reduction by helicopters NA.







CATEGORY	A		B		C		D	
S-13	1700-1	548	(600-1)		1700-1½	548 (600-1½)	1700-1¾	548 (600-1¾)
CIRCLING	1700-1	548	(600-1)		1700-1½	548 (600-1½)	1720-2	568 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

TACAN RWY 31

TACAN	RYM
Chan	48

APCH CRS
318°

Rwy ldg	6100
TDZE	1149
Arpt Elev	1152

AL-5226 [USA]

RAY S. MILLER AAF (KRYM)

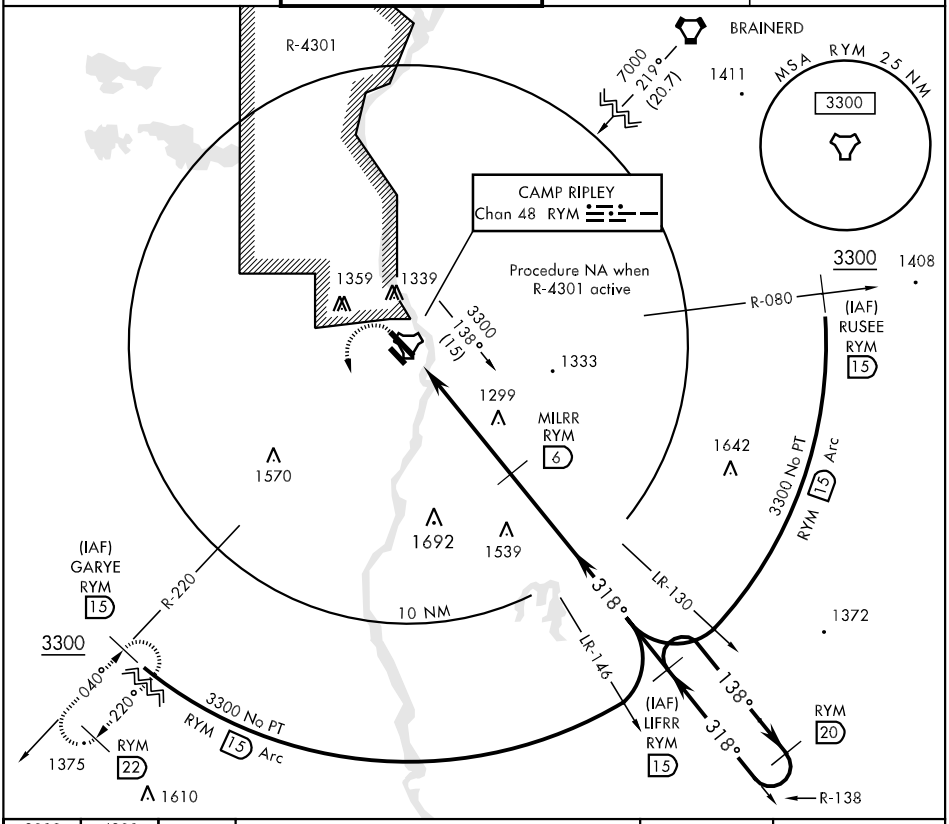
When local altimeter setting not received, use Little Falls altimeter setting and increase all MDA 40′ and INCR S-31 CAT D vis ¼ mile.

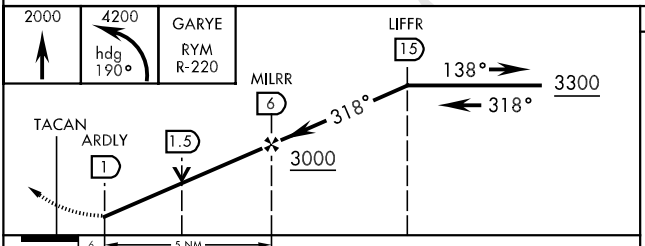
NA Inop table does not apply to CAT C.

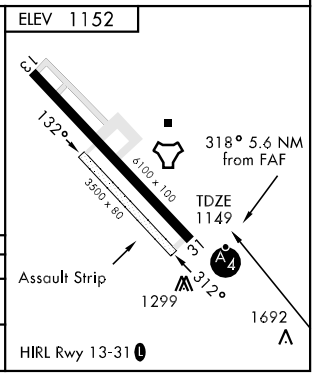
MALSF

MISSED APPROACH: Climb to 2000 then climbing left turn to 4200 via hdg 190° and RYM R-220 to GARYE (15 DME) and hold.

MINNEAPOLIS CENTER	MILLER TOWER ★	CLNC DEL	AWOS-3
118.05 239.0	126.2 (L) 254.4 49.2	126.2	148.35







CATEGORY	A	B	C	D
S-31	1560-¾ 411 (500-¾)		1560-1¼ 411 (500-1¼)	
CIRCLING	1620-1 468 (500-1)	1640-1 488 (500-1)	1640-1½ 488 (500-1½)	1720-2 568 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

CANBY

MYERS FLD (CNB) 1 N UTC−6(−5DT) N44°43.77′ W96°15.96′ **TWIN CITIES**
1194 B **FUEL** 100LL, JET A NOTAM FILE CNB **L–12I, 14H**
RWY 12–30: H4648X75 (ASPH) MIRL **IAP**
RWY 12: REIL. PAPI(P4L)—GA 3.0° TCH 25′. **RWY 30:** REIL. PAPI(P4L)—GA 3.0° TCH 29′. Thld dsplcd 239′. Road.
AIRPORT REMARKS: Unattended. Self service fuel avbl 24 hrs with credit card. MIRL Rwy 12–30 preset on low ints. To increase ints and ACTIVATE REIL Rwy 12 and Rwy 30 and PAPI Rwy 12 and Rwy 30—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.575 (507) 223–5293
COMMUNICATIONS: CTAF 122.9
MADISON RCO 122.3 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/CON** 128.5
GCO 121.725 (FLIGHT SERVICES).
RADIO AIDS TO NAVIGATION: NOTAM FILE MML.
MARSHALL (T) VORW/DME 111.0 MML Chan 47 N44°26.90′ W95°49.49′ 307° 25.3 NM to fld. 1180/5E.
AWOS–3 unmonitored.

CHANDLER FLD (See ALEXANDRIA)

CHATFIELD

FLYING A (2C4) 8 W UTC−6(−5DT) N43°49.00′ W92°20.21′ **CHICAGO**
1300 NOTAM FILE PNM
RWY 09–27: 3000X150 (TURF)
AIRPORT REMARKS: Attended 1400–0000Z‡. Ultralight tfc on and invof arpt. Major powerplant repairs avbl. Rwy 09–27 marked with yellow cones.
COMMUNICATIONS: CTAF 122.9

CHISHOLM–HIBBING (See HIBBING)

CLARISSA MUNI (8Y5) 2 SE UTC−6(−5DT) N46°06.78′ W94°54.40′ **TWIN CITIES**
1308 NOTAM FILE PNM
RWY 10–28: 2600X200 (TURF)
RWY 10: Trees. **RWY 28:** Trees.
AIRPORT REMARKS: Unattended. Confirm winter conditions with arpt manager prior to use due to irregular snow removal call 218–756–3592/218–756–2125/218–756–2335. Rwy 10–28 edges marked with yellow cones.
COMMUNICATIONS: CTAF 122.9

CLEAR LAKE

LEADERS CLEAR LAKE (8Y6) 2 E UTC−6(−5DT) N45°26.66′ W93°58.27′ **TWIN CITIES**
990 S4 **FUEL** 100LL NOTAM FILE PNM
RWY 18–36: 3000X150 (ASPH–TURF)
RWY 18: Trees. **RWY 36:** Road.
AIRPORT REMARKS: Attended 1400Z‡–dusk. There are several bare spots along the center of the rwy. Rwy 18–36 and dsplcd thresholds marked with yellow cones. Old A frame markers on north end do not coincide with rwy markings. Ultralight tfc on and invof arpt.
COMMUNICATIONS: CTAF 122.9

WAAS	APP CRS	Rwy Idg	4648
CH 56418	118°	TDZE	1194
W12A		Apt Elev	1194

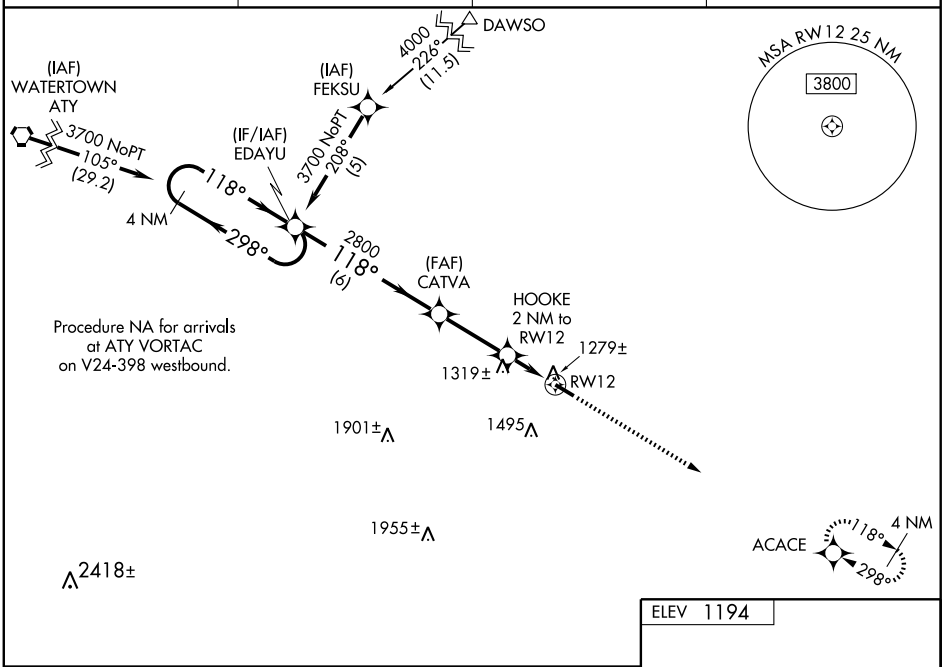
RNAV (GPS) RWY 12

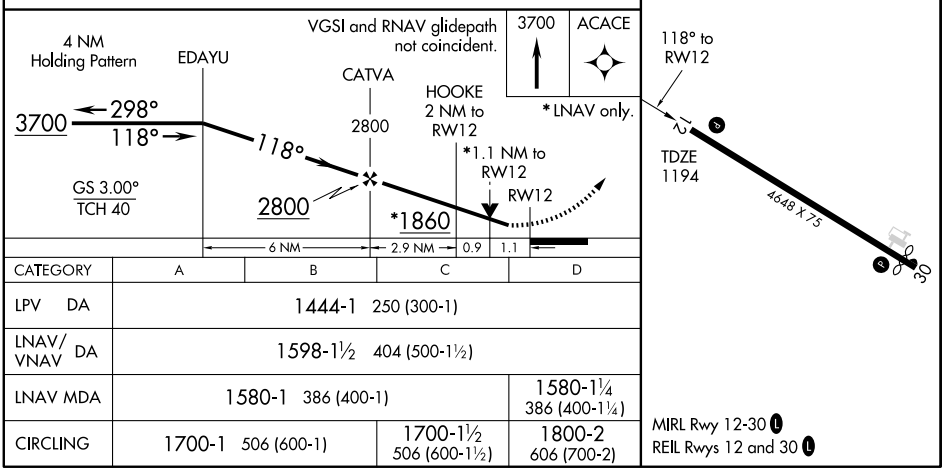
CANBY/MYERS FIELD (CNB)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. VDP NA with Lac Qui Parle County altimeter setting. Baro-VNAV NA when using Lac Qui Parle County altimeter setting. When local altimeter setting not received, use Lac Qui Parle County altimeter setting and increase all DA 53 feet, and all MDA 60 feet, increase LNAV/VNAV all Cats visibility ¼ mile, LNAV Cats C and D visibility ¼ mile.

MISSED APPROACH: Climb to 3700 direct ACACE and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.575	128.5 306.2	121.725	122.9 L





CATEGORY	A	B	C	D
LPV DA	1444-1 250 (300-1)			
LNAV/VNAV DA	1598-1½ 404 (500-1½)			
LNAV MDA	1580-1 386 (400-1)			1580-1¼ 386 (400-1¼)
CIRCLING	1700-1 506 (600-1)		1700-1½ 506 (600-1½)	1800-2 606 (700-2)

MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	4409
CH 77718	298°	TDZE	1192
W30A		Apt Elev	1194

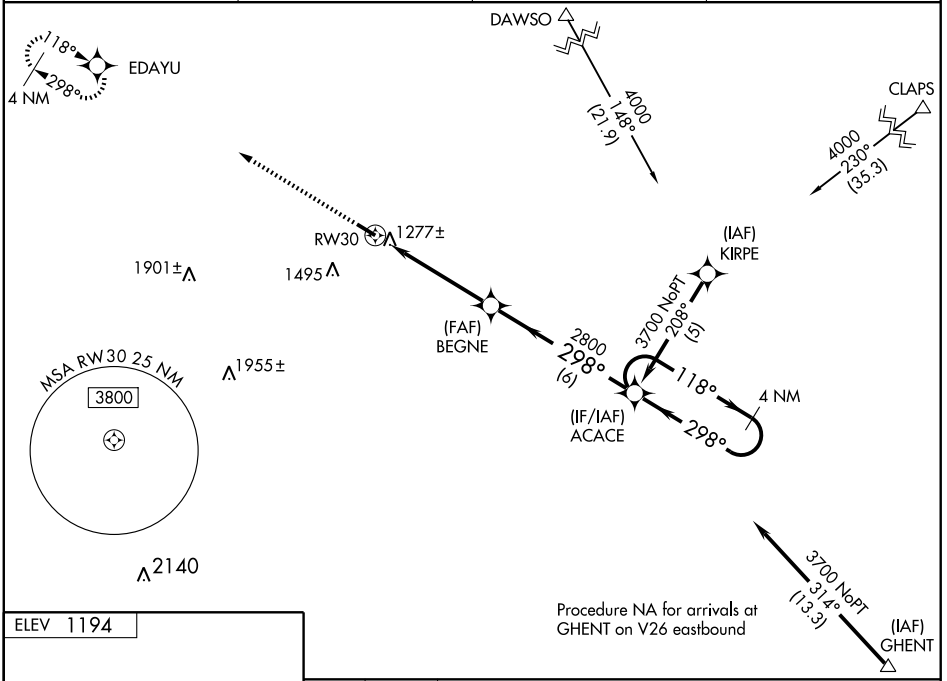
RNAV (GPS) RWY 30

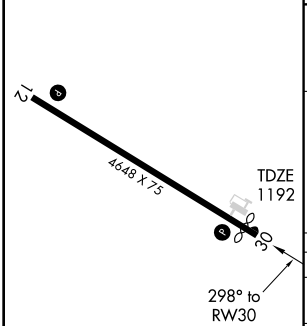
CANBY/MYERS FIELD (CNB)

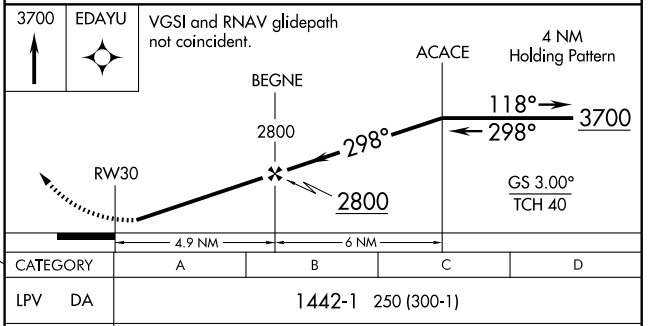
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Baro-VNAV NA when using Lac Qui Parle County altimeter setting. When local altimeter setting not received, use Lac Qui Parle County altimeter setting and increase all DA 53 feet, and all MDA 60 feet, increase LNAV Cats C and D visibility ¼ mile.

MISSED APPROACH: Climb to 3700 direct EDAYU and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.575	128.5 306.2	121.725	122.9 L



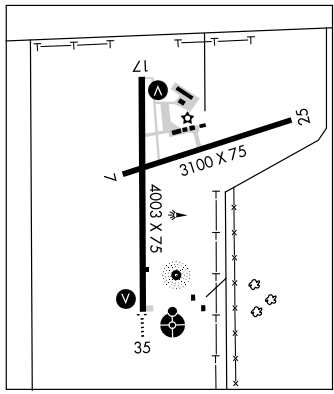




CATEGORY	A	B	C	D
LPV DA	1442-1 250 (300-1)			
LNAV/VNAV DA	1573-1½ 381 (400-1½)			
LNAV MDA	1680-1 488 (500-1)		1680-1¼ 488 (500-1¼)	1680-1½ 488 (500-1½)
CIRCLING	1700-1 506 (600-1)		1700-1½ 506 (600-1½)	1800-2 606 (700-2)

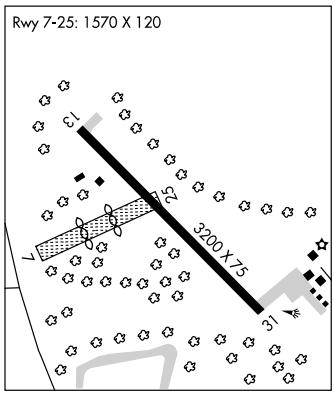
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

CLOQUET CARLTON CO (COQ) 3 SW UTC−6(−5DT) N46°42.07′ W92°30.22′ GREEN BAY
1279 B S4 **FUEL** 100LL, JET A NOTAM FILE COQ L–14I
RWY 17–35: H4003X75 (ASPH) S–8, D–12 MIRL IAP
RWY 17: REIL. VASI(V4L)—GA 3.0° TCH 29′.
RWY 35: ODALS. VASI(V4L).
RWY 07–25: H3100X75 (ASPH). MIRL. 0.3% up SW
RWY 07: Trees.
AIRPORT REMARKS: Attended Mon–Sat 1400–2300Z‡. Fuel avbl 24 hrs credit card svc. For svc after hrs 218–591–6157. ACTIVATE MIRL Rwy 17–35 and Rwy 07–25, VASI Rwy 17 and Rwy 35, ODALS Rwy 35 and REIL Rwy 17—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.525 (218) 879–0783.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **DULUTH APP/DEP CON** 125.45 (1200–0500Z‡) **CLNC DEL** 122.15
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.9 (0500–1200Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE DLH.
DULUTH (H) VORTACW 112.6 DLH Chan 73 N46°48.13′ W92°12.17′ 239° 13.8 NM to fld. 1428/5E.
NDB (MHW) 335 COQ N46°41.83′ W92°30.20′ at fld. NOTAM FILE COQ.



COOK COUNTY N47°50.40′ W90°23.14′ NOTAM FILE CKC. GREEN BAY
NDB (MHW) 358 CKC at Grand Marais/Cook County. L–14I

COOK MUNI (CQM) 2 S UTC−6(−5DT) N47°49.31′ W92°41.44′ GREEN BAY
1327 B **FUEL** 100LL, JET A NOTAM FILE CQM L–14I
RWY 13–31: H3200X75 (ASPH) MIRL 0.3% up NW IAP
RWY 13: Trees. **RWY 31:** Trees.
RWY 07–25: 1570X120 (TURF)
RWY 07: Thld dsplcd 585′. Trees.
RWY 25: Thld dsplcd 625′.
AIRPORT REMARKS: Attended 1500–1900Z‡. Self svc fuel avbl 24 hrs. Rwy 07–25 CLOSED winter months. Rwy 13–31 rough ride, secondary cracking, alligator cracking. Rwy 07–25 and dsplcd thlds marked with yellow cones. MIRL Rwy 13–31 preset low ints, to increase ints ACTIVATE—CTAF
WEATHER DATA SOURCES: AWOS–3 118.175 (218) 666–2539.
COMMUNICATIONS: CTAF 122.9
EVELETH RCO 122.45 (PRINCETON RADIO)
RADIO AIDS TO NAVIGATION: NOTAM FILE HIB.
HIBBING (L) VORW/DME 110.8 HIB Chan 45 N47°18.09′ W92°42.24′ 359° 31.2 NM to fld. 1312/2E.



CRANE LAKE N48°15.60′ W92°28.48′ GREEN BAY
RCO 122.2 (PRINCETON RADIO) L–14I

CRANE LAKE

SCOTTS SPB (CDD) 0 NE UTC−6(−5DT) N48°16.00′ W92°29.01′ GREEN BAY
1119 **FUEL** 100LL, MOGAS LRA NOTAM FILE CDD
WATERWAY 07–25: 8000X1000 (WATER)
WATERWAY 16–34: 7000X1000 (WATER)
SEAPLANE REMARKS: Attended May–Sep 1300Z‡–dark. Inlet southwest of dock is a congested area, avoid as approach/departure area.
WEATHER DATA SOURCES: AWOS–3 385 SCG (218) 993–2467.
COMMUNICATIONS: CTAF/UNICOM 122.8
RADIO AIDS TO NAVIGATION: NOTAM FILE CDD.
SCOTT NDB (MHW) 385 SCG N48°15.60′ W92°28.48′ at fld. **AWOS–3.** VFR only.

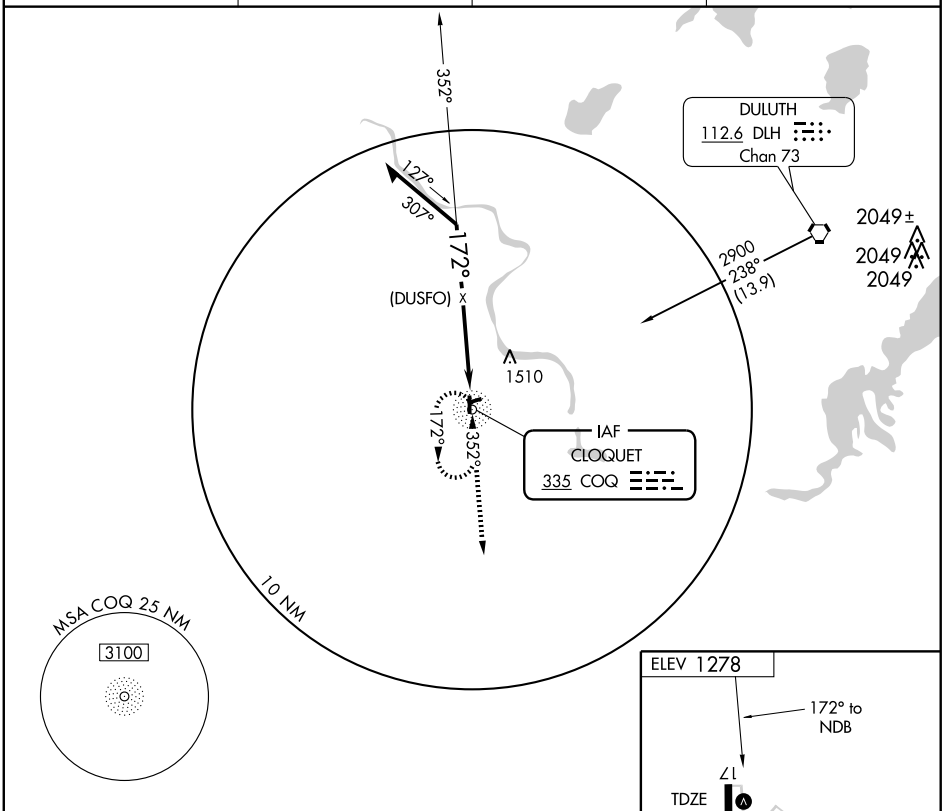
NDB COQ 335	APP CRS 172°	Rwy Idg 4003 TDZE 1274 Apt Elev 1279

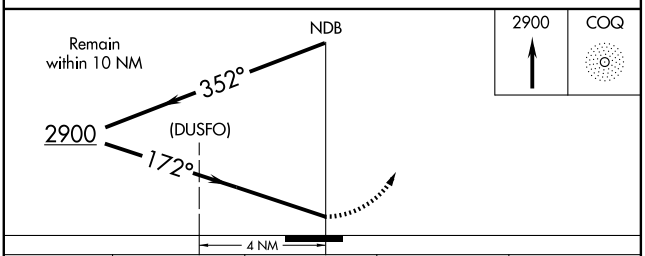
NDB or GPS RWY 17
CLOQUET CARLTON COUNTY (COQ)

T
NA

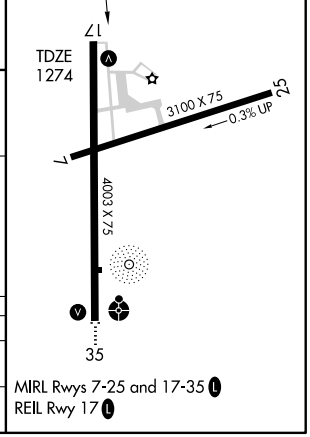
MISSED APPROACH: Climb to 2900 then direct COQ NDB and hold.

AWOS-3	DULUTH APP CON ★	CLNC DEL	UNICOM
118.525	125.45 255.9	122.15	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-17	1860-1	586 (600-1)	1860-1½ 586 (600-1½)	NA
CIRCLING	1860-1	582 (600-1)	1860-1½ 582 (600-1½)	NA



NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

NDB COQ 335	APP CRS 005°	Rwy Idg 4003 TDZE 1278 Apt Elev 1279

NDB RWY 35

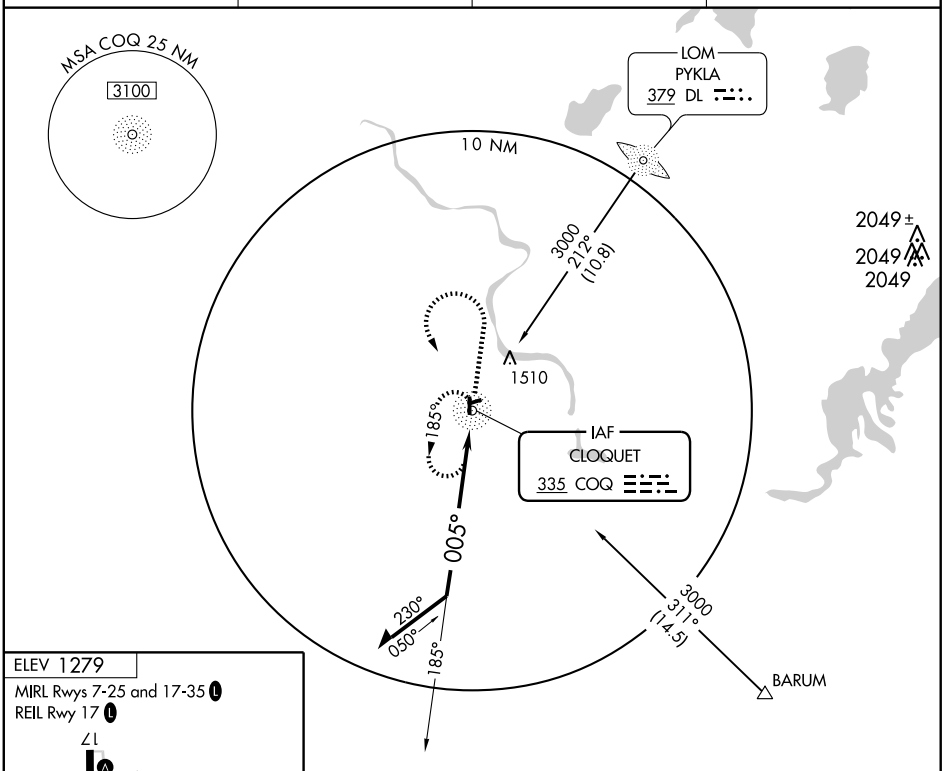
CLOQUET CARLTON COUNTY (COQ)

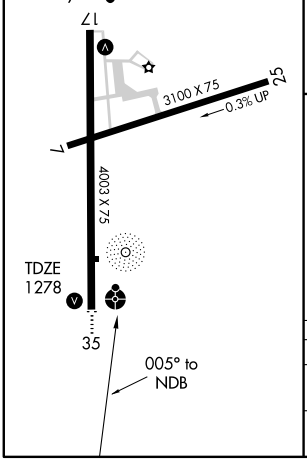
T NA When local altimeter setting not received, use Duluth Intl altimeter setting and increase all MDAs 60 feet and increase S-35 and Circling Cat. C visibilities ¼ mile.

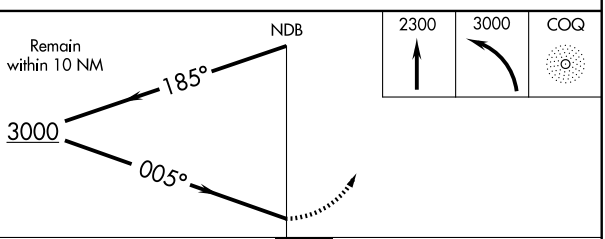
ODALS

MISSED APPROACH: Climb to 2300 then climbing left turn to 3000 direct COQ NDB and hold, continue climb-in-hold to 3000.

AWOS-3	DULUTH APP CON ★	CLNC DEL	UNICOM
118.525	125.45 255.9	122.15	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-35	1860-1	582 (600-1)	1860-1½ 582 (600-1½)	NA
CIRCLING	1860-1	581 (600-1)	1860-1½ 581 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	4003
356°	TDZE	1278
	Apt Elev	1279

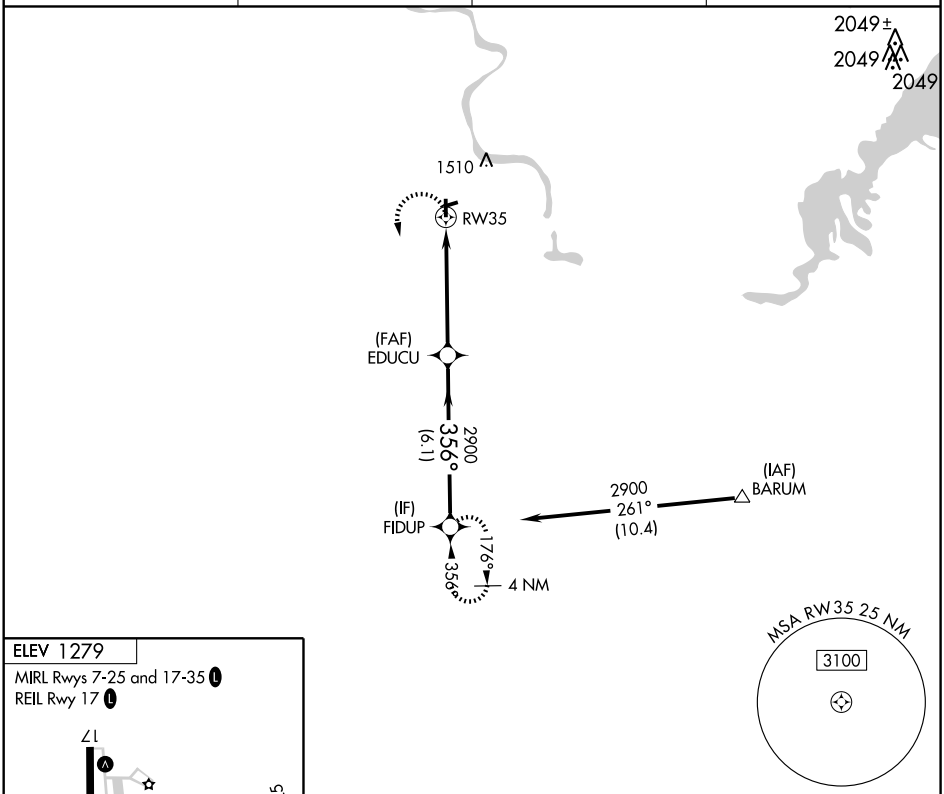
RNAV (GPS) RWY 35
CLOQUET CARLTON COUNTY (COQ)

DME/DME RNP-0.3 NA.
VDP NA when using Duluth Intl altimeter setting.
When local altimeter setting not received, use Duluth Intl altimeter setting and increase all MDAs 60 feet and Cat. C Circling visibility ¼ mile.

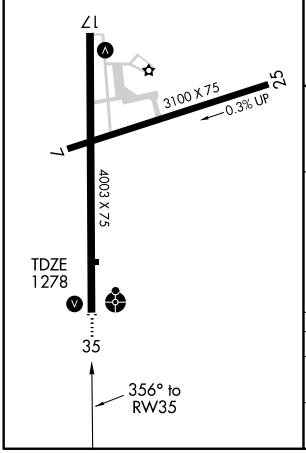
ODALS

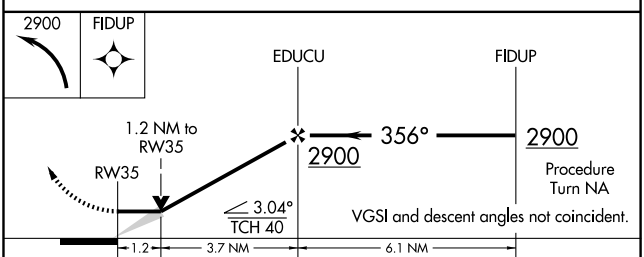
MISSED APPROACH: Climbing left turn to 2900 direct FIDUP and hold.

AWOS-3	DULUTH APP CON ★	CLNC DEL	UNICOM
118.525	125.45 255.9	122.15	122.8 (CTAF) L



ELEV 1279
MIRL Rwys 7-25 and 17-35 L
REIL Rwy 17 L





CATEGORY	A	B	C	D
LNAV MDA	1680-1	402 (500-1)	1680-1¼ 402 (500-1¼)	NA
CIRCLING	1740-1 461 (500-1)	1780-1 501 (600-1)	1860-1½ 581 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VORTAC DLH	APP CRS	Rwy Idg	N/A
112.6	059°	TDZE	N/A
Chan 73		Apt Elev	1279

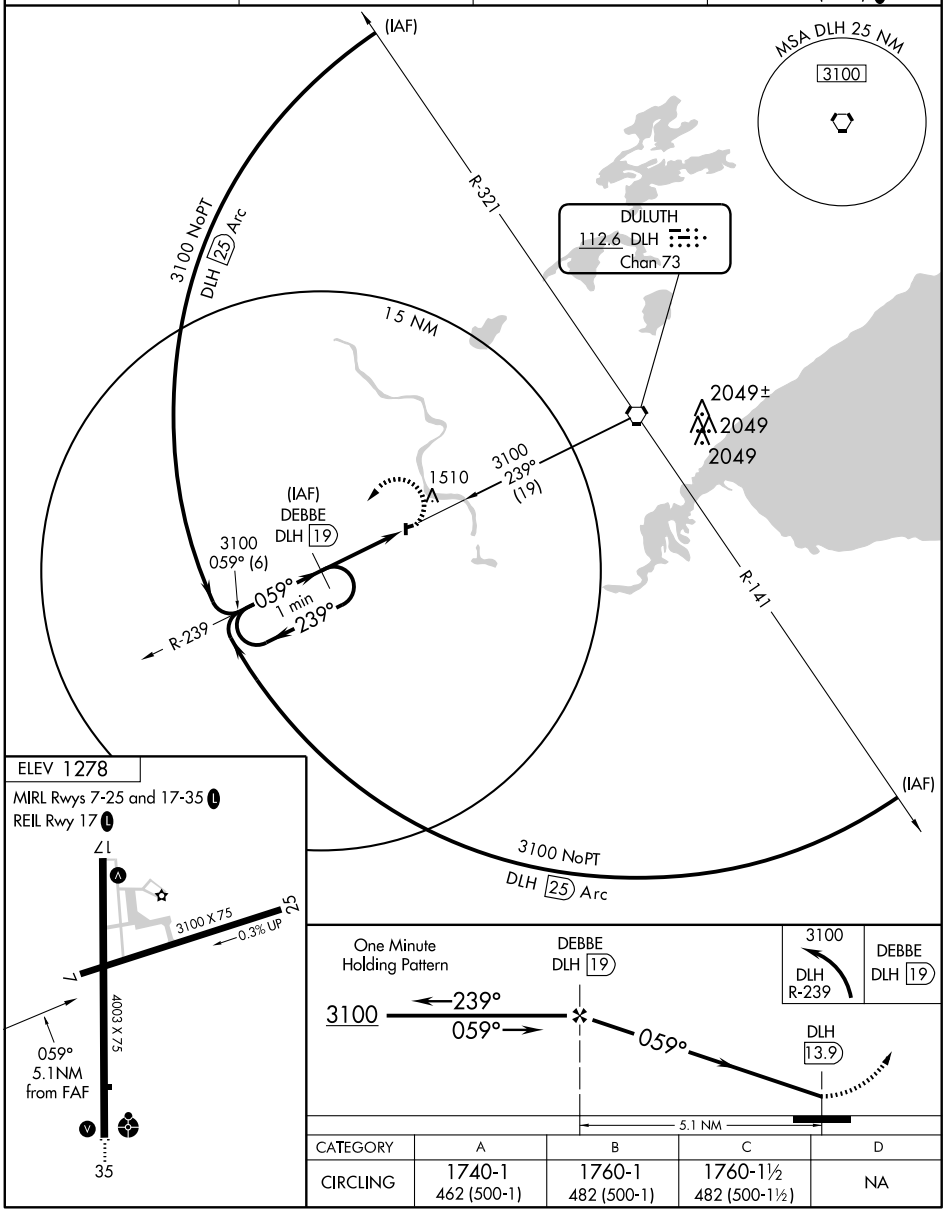
VOR/DME-A

CLOQUET CARLTON COUNTY (COQ)

T
NA

MISSED APPROACH: Climbing left turn to 3100 via DLH R-239 to DEBBE DLH 19 DME and hold.

AWOS-3	DULUTH APP CON ★	CLNC DEL	UNICOM
118.525	125.45 255.9	122.15	122.8 (CTAF) L



ELEV 1278

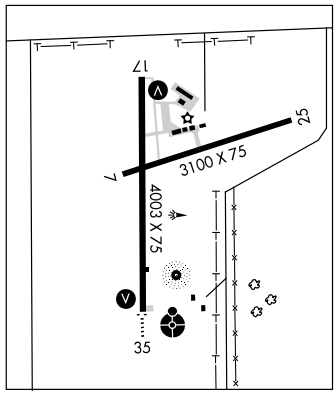
MIRL Rwys 7-25 and 17-35 L

REIL Rwy 17 L

CATEGORY	A	B	C	D
CIRCLING	1740-1 462 (500-1)	1760-1 482 (500-1)	1760-1½ 482 (500-1½)	NA

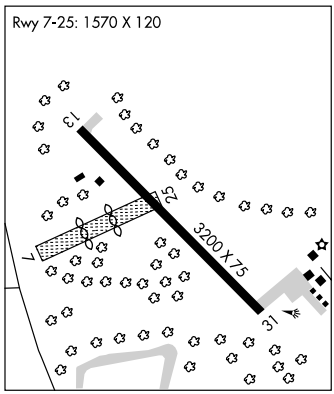
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

CLOQUET CARLTON CO (COQ) 3 SW UTC−6(−5DT) N46°42.07′ W92°30.22′ GREEN BAY
1279 B S4 **FUEL** 100LL, JET A NOTAM FILE COQ L–14I
RWY 17–35: H4003X75 (ASPH) S–8, D–12 MIRL IAP
RWY 17: REIL. VASI(V4L)—GA 3.0° TCH 29′.
RWY 35: ODALS. VASI(V4L).
RWY 07–25: H3100X75 (ASPH). MIRL. 0.3% up SW
RWY 07: Trees.
AIRPORT REMARKS: Attended Mon–Sat 1400–2300Z‡. Fuel avbl 24 hrs credit card svc. For svc after hrs 218–591–6157. ACTIVATE MIRL Rwy 17–35 and Rwy 07–25, VASI Rwy 17 and Rwy 35, ODALS Rwy 35 and REIL Rwy 17—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.525 (218) 879–0783.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **DULUTH APP/DEP CON** 125.45 (1200–0500Z‡) **CLNC DEL** 122.15
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.9 (0500–1200Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE DLH.
DULUTH (H) VORTACW 112.6 DLH Chan 73 N46°48.13′ W92°12.17′ 239° 13.8 NM to fld. 1428/5E.
NDB (MHW) 335 COQ N46°41.83′ W92°30.20′ at fld. NOTAM FILE COQ.



COOK COUNTY N47°50.40′ W90°23.14′ NOTAM FILE CKC. GREEN BAY
NDB (MHW) 358 CKC at Grand Marais/Cook County. L–14I

COOK MUNI (CQM) 2 S UTC−6(−5DT) N47°49.31′ W92°41.44′ GREEN BAY
1327 B **FUEL** 100LL, JET A NOTAM FILE CQM L–14I
RWY 13–31: H3200X75 (ASPH) MIRL 0.3% up NW IAP
RWY 13: Trees. **RWY 31:** Trees.
RWY 07–25: 1570X120 (TURF)
RWY 07: Thld dsplcd 585′. Trees.
RWY 25: Thld dsplcd 625′.
AIRPORT REMARKS: Attended 1500–1900Z‡. Self svc fuel avbl 24 hrs. Rwy 07–25 CLOSED winter months. Rwy 13–31 rough ride, secondary cracking, alligator cracking. Rwy 07–25 and dsplcd thlds marked with yellow cones. MIRL Rwy 13–31 preset low ints, to increase ints ACTIVATE—CTAF
WEATHER DATA SOURCES: AWOS–3 118.175 (218) 666–2539.
COMMUNICATIONS: CTAF 122.9
EVELETH RCO 122.45 (PRINCETON RADIO)
RADIO AIDS TO NAVIGATION: NOTAM FILE HIB.
HIBBING (L) VORW/DME 110.8 HIB Chan 45 N47°18.09′ W92°42.24′ 359° 31.2 NM to fld. 1312/2E.



CRANE LAKE N48°15.60′ W92°28.48′ GREEN BAY
RCO 122.2 (PRINCETON RADIO) L–14I

CRANE LAKE

SCOTTS SPB (CDD) 0 NE UTC−6(−5DT) N48°16.00′ W92°29.01′ GREEN BAY
1119 **FUEL** 100LL, MOGAS LRA NOTAM FILE CDD
WATERWAY 07–25: 8000X1000 (WATER)
WATERWAY 16–34: 7000X1000 (WATER)
SEAPLANE REMARKS: Attended May–Sep 1300Z‡–dark. Inlet southwest of dock is a congested area, avoid as approach/departure area.
WEATHER DATA SOURCES: AWOS–3 385 SCG (218) 993–2467.
COMMUNICATIONS: CTAF/UNICOM 122.8
RADIO AIDS TO NAVIGATION: NOTAM FILE CDD.
SCOTT NDB (MHW) 385 SCG N48°15.60′ W92°28.48′ at fld. **AWOS–3.** VFR only.

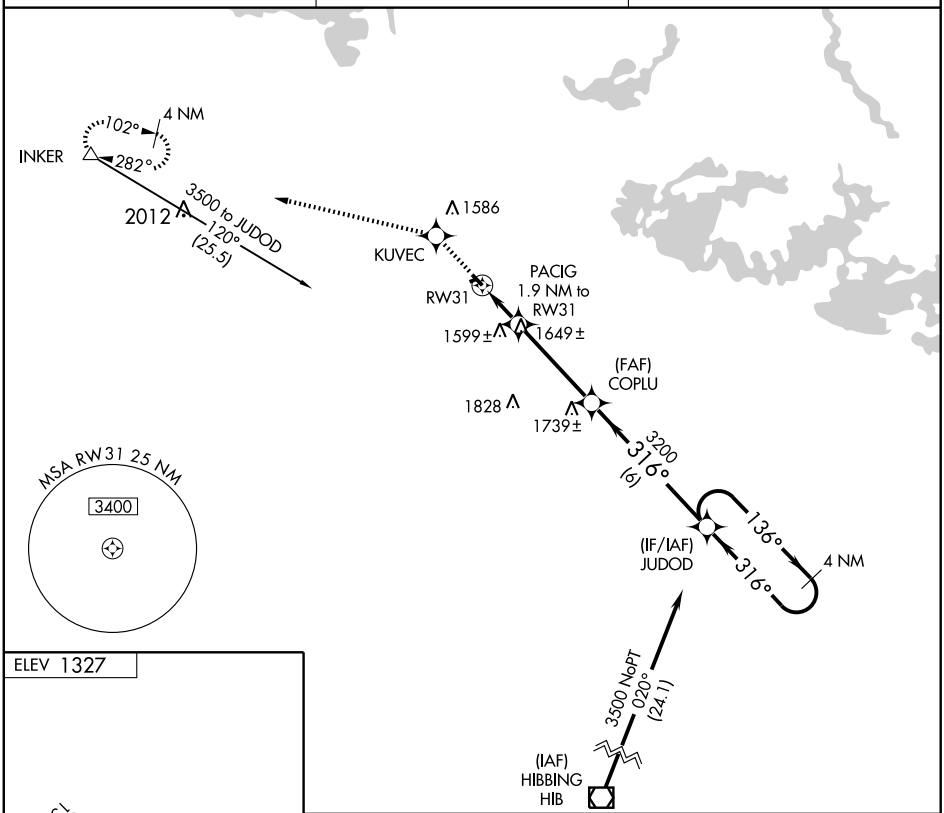
APP CRS	Rwy Idg	3200
316°	TDZE	1327
	Apt Elev	1327

RNAV (GPS) RWY 31
COOK MUNI (CQM)

DME/DME RNP- 0.3 NA.
Procedure NA at night.

MISSED APPROACH: Climb to 3600 direct KUVEC and via 282° track to INKER and hold.

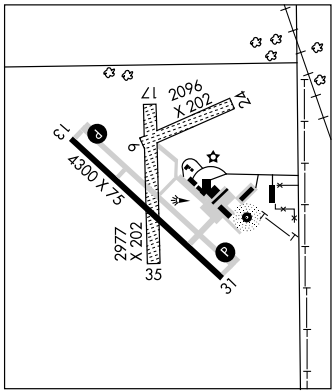
AWOS-3	PRINCETON RADIO	CTAF
118.175	122.45	122.9 L



CATEGORY	A	B	C	D
LNAV MDA	1820-1 493 (500-1)		NA	
CIRCLING	1900-1 573 (600-1)		NA	

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

CROOKSTON MUNI KIRKWOOD FLD (CKN) 4 N UTC−6(−5DT) N47°50.50′ W96°37.29′ — TWIN CITIES
900 B S4 **FUEL** 100LL, JET A TPA—1700(800) NOTAM FILE CKN — L–14G
RWY 13–31: H4300X75 (ASPH) S–11, D–16 MIRL — IAP
RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 30′.
RWY 31: REIL. PAPI(P4R)—GA 3.0° TCH 40′.
RWY 17–35: 2977X202 (TURF)
RWY 06–24: 2096X202 (TURF) 0.4% up NE
RWY 24: Trees.
AIRPORT REMARKS: Attended dalgt hours. Fuel avbl 24 hrs with credit card. Rwy 17–35 and Rwy 06–24 CLOSED winter months. Rwy 13 designated no wind rwy. Rwy 06–24 and Rwy 17–35 marked with yellow cones. ACTIVATE MIRL Rwy 13–31, REIL Rwy 13 and Rwy 31 and PAPI Rwy 13 and Rwy 31—CTAF.
WEATHER DATA SOURCES: AWOS–3 400 CKN (218) 281–3018.
COMMUNICATIONS: CTAF/UNICOM 122.7
Ⓡ **GRAND FORKS APP/DEP CON** 118.1 **CLNC DEL** 118.15
RADIO AIDS TO NAVIGATION: NOTAM FILE GFK.
GRAND FORKS (H) VORW/DME 114.3 GFK Chan 90 N47°57.29′ W97°11.12′ 097° 23.8 NM to fld. 841/9E. **HIWAS.**
NDB (MHW) 400 CKN N47°50.42′ W96°36.99′ at fld.
AWOS–3. NOTAM FILE CKN.



CRYSTAL (See MINNEAPOLIS)

DARWIN N45°05.25′ W94°27.23′ NOTAM FILE PNM. — TWIN CITIES
(L) VORTAC 109.0 DWN Chan 27 277° 2.3 NM to Litchfield Muni. 1130/7E. — L–12I, 14H
RCO 122.1R 109.0T (PRINCETON RADIO)

DAWSON–MADISON N44°59.05′ W96°10.75′ NOTAM FILE DXX. — OMAHA
NDB (MHW) 341 DXX at Lac Qui Parle Co. **AWOS–3**. — L–12I, 14H

DEERWOOD

BIRCH LAKE SPB (M69) 6 NW UTC−6(−5DT) N46°22.18′ W93°48.83′ — TWIN CITIES
1278 NOTAM FILE PNM
WATERWAY 13–31: 6000X2000 (WATER)
WATERWAY 07–25: 5000X2000 (WATER)
SEAPLANE REMARKS: Unattended.
COMMUNICATIONS: CTAF 122.9

MAL'S SERPENT LAKE SPB (M14) 1 E UTC−6(−5DT) N46°28.45′ W93°55.12′ — TWIN CITIES
1246 NOTAM FILE PNM
WATERWAY 06W–24W: 10000X500 (WATER)
WATERWAY 06: Rgt tfc.
WATERWAY 18W–36W: 6000X500 (WATER)
SEAPLANE REMARKS: Unattended. Avoid overflight of Crosby Hospital 1.4 NM NW.
COMMUNICATIONS: CTAF 122.9

NDB CKN	APP CRS	Rwy Idg	4300
400	122°	TDZE	896
		Apt Elev	900

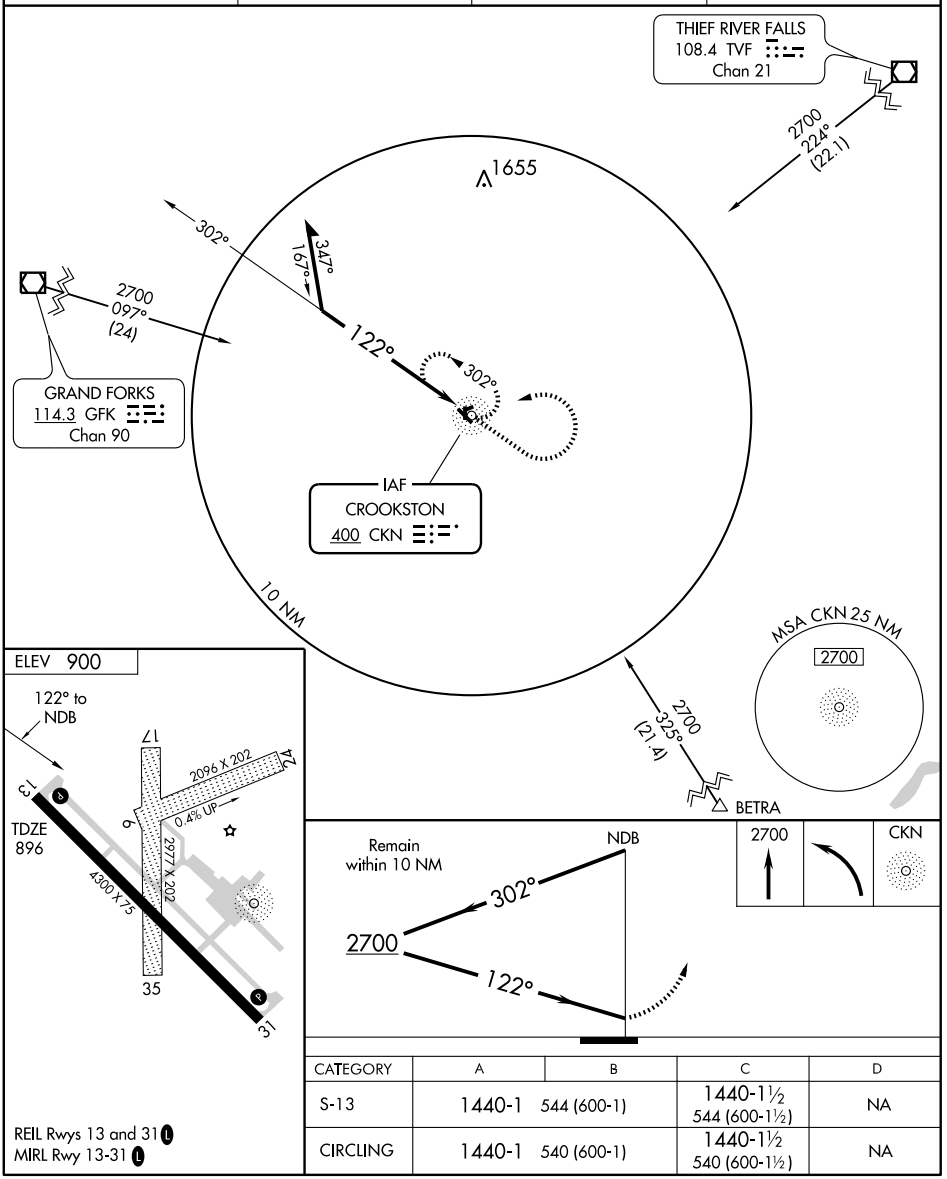
NDB RWY 13

CROOKSTON MUNI-KIRKWOOD FIELD (CKN)

When local altimeter setting not received, use Grand Forks Intl altimeter setting and increase all MDA 80 feet, increase all Cat C visibities ¼ mile.

MISSED APPROACH: Climb to 2700 then left turn direct CKN NDB and hold.

AWOS-3	GRAND FORKS APP CON	CLNC DEL	UNICOM
400	118.1 318.1	118.15	122.7 (CTAF) L



CATEGORY	A	B	C	D
S-13	1440-1	544 (600-1)	1440-1½ 544 (600-1½)	NA
CIRCLING	1440-1	540 (600-1)	1440-1½ 540 (600-1½)	NA

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	4300
CH 72704	128°	TDZE	896
W13A		Apt Elev	900

RNAV (GPS) RWY 13

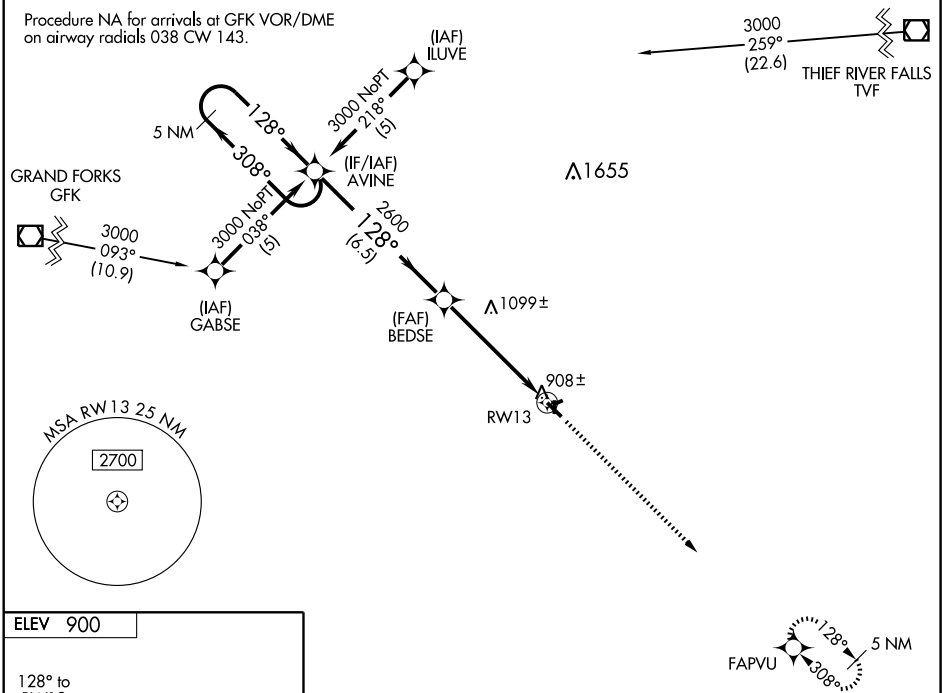
CROOKSTON MUNI-KIRKWOOD FIELD (CKN)

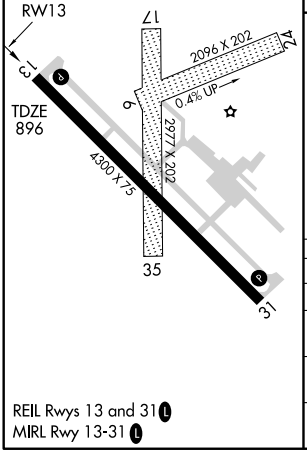
Baro-VNAV NA when using Grand Forks altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.
If local altimeter setting not received, use Grand Forks altimeter setting and increase all DAs 62 feet and all MDAs 80 feet.

MISSED APPROACH: Climb to 3000 direct FAPVU and hold.

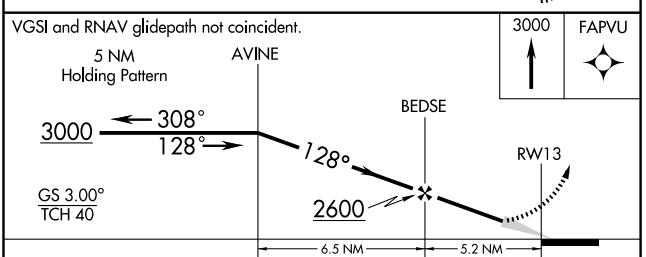
AWOS-3	GRAND FORKS APP CON	CLNC DEL	UNICOM
400	118.1 318.1	118.15	122.7 (CTAF) L

Procedure NA for arrivals at GFK VOR/DME on airway radials 038 CW 143.





REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LPV DA	1146-1 250 (300-1)			NA
LNAV/VNAV DA	1210-1 314 (400-1)			NA
LNAV MDA	1360-1 464 (500-1)		1360-1¼ 464 (500-1¼)	NA
CIRCLING	1360-1 460 (500-1)		1360-1½ 460 (500-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	4300
CH 69304	308°	TDZE	897
W31A		Apt Elev	900

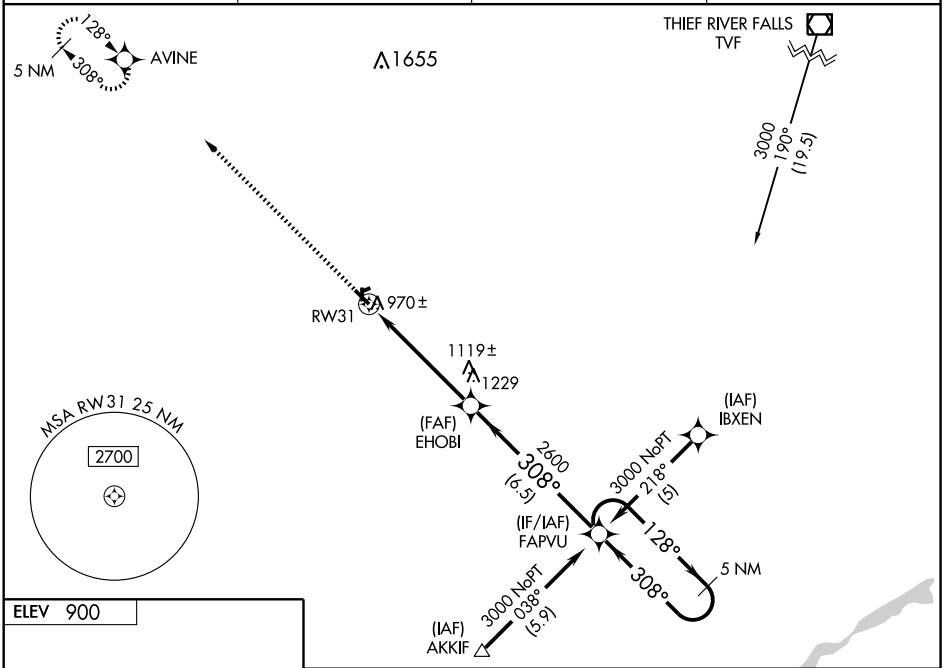
RNAV (GPS) RWY 31

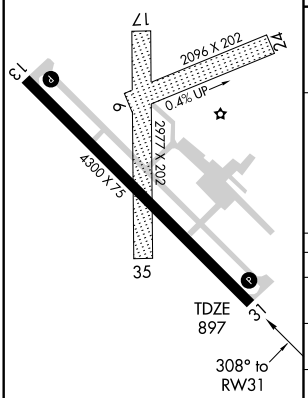
CROOKSTON MUNI-KIRKWOOD FIELD (CKN)

Baro-VNAV NA when using Grand Forks altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F).
If local altimeter setting not received, use Grand Forks altimeter setting and increase all DAs 62 feet and all MDAs 80 feet.
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.

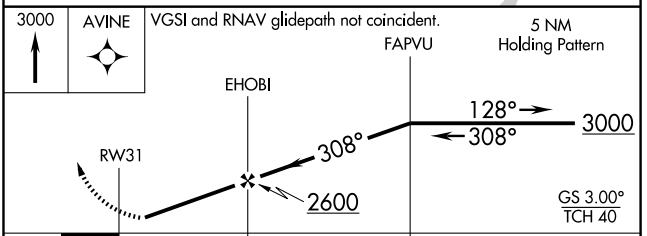
MISSED APPROACH: Climb to 3000 direct AVINE and hold.

AWOS-3	GRAND FORKS APP CON	CLNC DEL	UNICOM
400	118.1 318.1	118.15	122.7 (CTAF) L





REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L



CATEGORY	A	B	C	D
LPV DA	1157-1 260 (300-1)			NA
LNAV/VNAV DA	1320-1½ 423 (500-1½)			NA
LNAV MDA	1380-1 483 (500-1)		1380-1¼ 483 (500-1¼)	NA
CIRCLING	1380-1 480 (500-1)		1380-1½ 480 (500-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

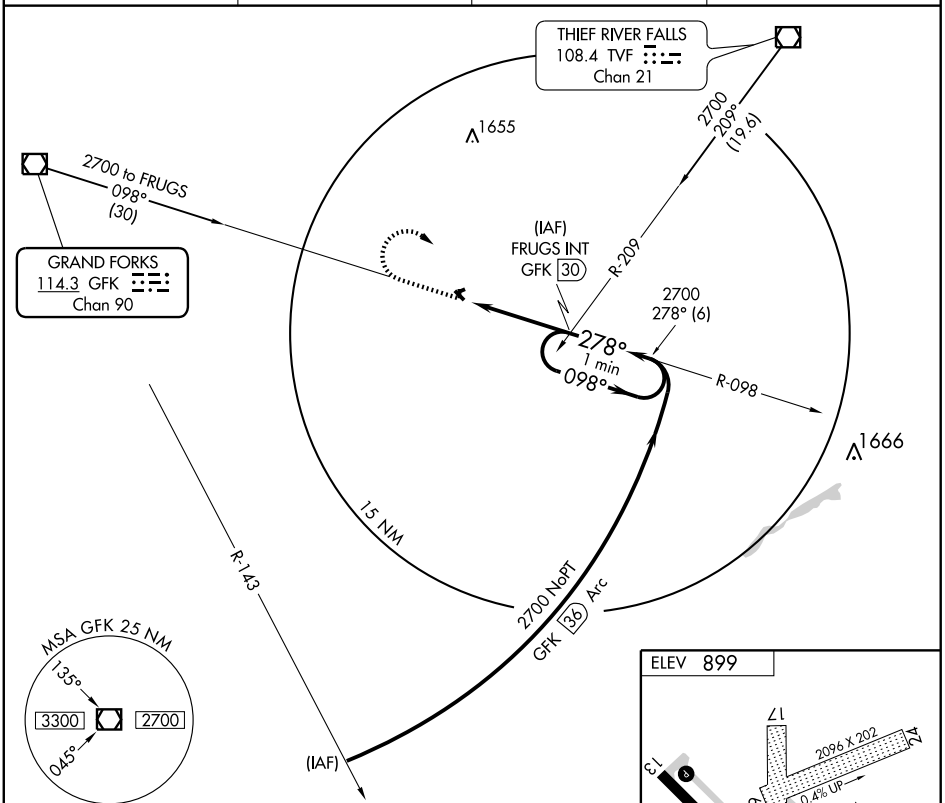
VOR/DME GFK	APP CRS	Rwy Idg	4300
114.3	278°	TDZE	896
Chan 90		Apt Elev	899

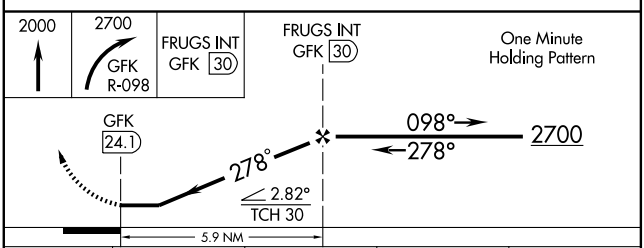
VOR RWY 31

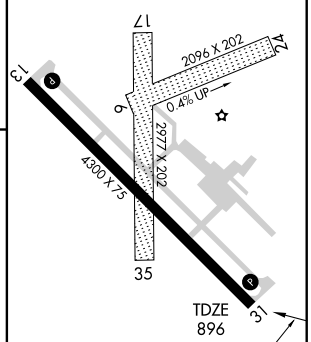
CROOKSTON MUNI-KIRKWOOD FIELD (CKN)

MISSED APPROACH: Climb to 2000 then climbing right turn to 2700 via GFK R-098 to FRUGS Int and hold.

AWOS-3	GRAND FORKS APP CON	CLNC DEL	UNICOM
400	118.1 318.1	118.15	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-31	1700-1 804 (900-1)	1700-1¼ 804 (900-1¼)	1700-2¼ 804 (900-2¼)	NA
CIRCLING	1700-1 801 (900-1)	1700-1¼ 801 (900-1¼)	1700-2¼ 801 (900-2¼)	NA

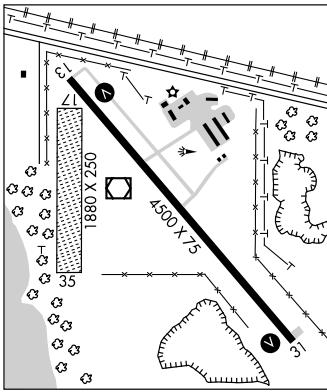
REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

278° 5.9 NM from FAF

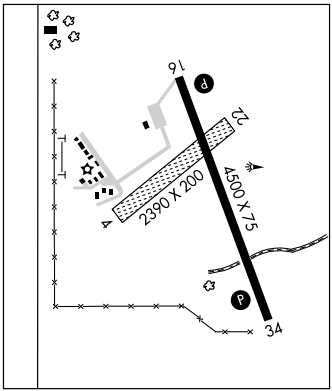
FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

DETROIT LAKES–WETHING FLD (DTL) 2 W UTC−6(−5DT) N46°49.51′ W95°53.14′ **TWIN CITIES**
1397 B S4 **FUEL** 100LL, JET A TPA—2197(800) NOTAM FILE DTL **L–14H**
RWY 13–31: H4500X75 (ASPH) S–23, D–42 MIRL 0.8% up NW **IAP**
RWY 13: REIL. VASI(V4L)—TCH 45′. Road.
RWY 31: REIL. VASI(V4L)—TCH 35′. Trees.
RWY 17–35: 1880X250 (TURF)
RWY 35: Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–0000Z‡, Sat 1500–2200Z‡. Self svc avbl 24 hrs. Ultralights on and invof arpt. Rwy 17–35 CLOSED winter months. Rwy 17–35 marked with cones. Rwy 13 and Rwy 31 omnidirectional REIL. ACTIVATE MIRL Rwy 13–31 and REIL Rwy 13 and Rwy 31 and VASI Rwy 13 and 31—CTAF.
WEATHER DATA SOURCES: AWOS–3 111.2 DTL (218) 847–8626.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.5 (PRINCETON RADIO)
RADIO AIDS TO NAVIGATION: NOTAM FILE DTL.
(T) VORW/DME 111.2 DTL Chan 49 N46°49.54′ W95°53.23′ at fld. 1387/5E. **AWOS–3**. Unmonitored.



DODGE CENTER (TOB) 1 SE UTC−6(−5DT) N44°01.08′ W92°49.90′ **GREEN BAY**
1305 B S4 **FUEL** 100LL NOTAM FILE TOB **L–12J**
RWY 16–34: H4500X75 (CONC) MIRL **IAP**
RWY 16: REIL. PAPI(P4L)—GA 3.0° TCH 28′. Trees.
RWY 34: REIL. PAPI(P4L). —GA 3.0° TCH 40′.
RWY 04–22: 2390X200 (TURF)
RWY 04: Road. **RWY 22:** Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Self svc fuel avbl with credit card. Rwy 04–22 CLOSED winter months. Ultralight tfc on and invof arpt. Windmills 1.5 miles SW of arpt. Rwy 04–22 marked with yellow cones. MIRL Rwy 16–34 preset on low ints, to increase ints and ACTIVATE REIL and PAPI Rwy 16 and Rwy 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.075 (507) 374–6369.
COMMUNICATIONS: CTAF 122.9
Ⓡ **ROCHESTER APP/DEP CON** 119.8 (1100–0400Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.35 (0400–1100Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE RST.
ROCHESTER (L) VORW/DME 112.0 RST Chan 57 N43°46.97′ W92°35.82′ 319° 17.4 NM to fld. 1389/5E. **HIWAS.**



APP CRS	Rwy Idg	4500
135°	TDZE	1397
	Apt Elev	1397

RNAV (GPS) RWY 13

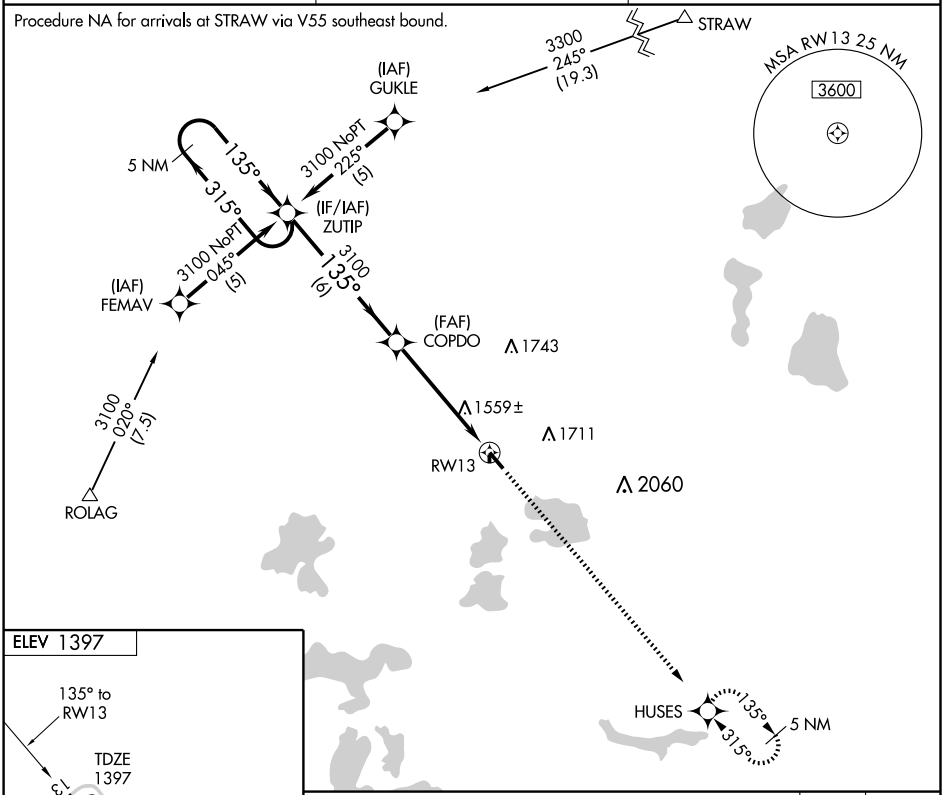
DETROIT LAKES-WETHING FIELD (DTL)

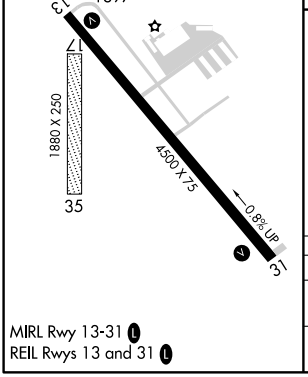
When VGSI inoperative, straight-in/circling Rwy 13 procedure NA at night.
DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.
If local altimeter setting not received, use Park Rapids altimeter setting and increase DA/MDAs 100 feet.

MISSED APPROACH: Climb to 3100 direct HUSES and hold.

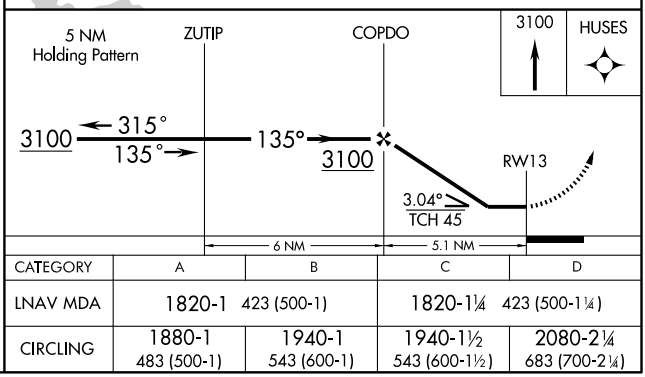
AWOS-3	PRINCETON RADIO	UNICOM
111.2	122.5	122.8 (CTAF) L

Procedure NA for arrivals at STRAW via V55 southeast bound.





MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L



CATEGORY	A	B	C	D
LNAV MDA	1820-1 423 (500-1)		1820-1¼ 423 (500-1¼)	
CIRCLING	1880-1 483 (500-1)	1940-1 543 (600-1)	1940-1½ 543 (600-1½)	2080-2¼ 683 (700-2¼)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	4500
CH 86704	315°	TDZE	1390
W31A		Apt Elev	1397

RNAV (GPS) RWY 31

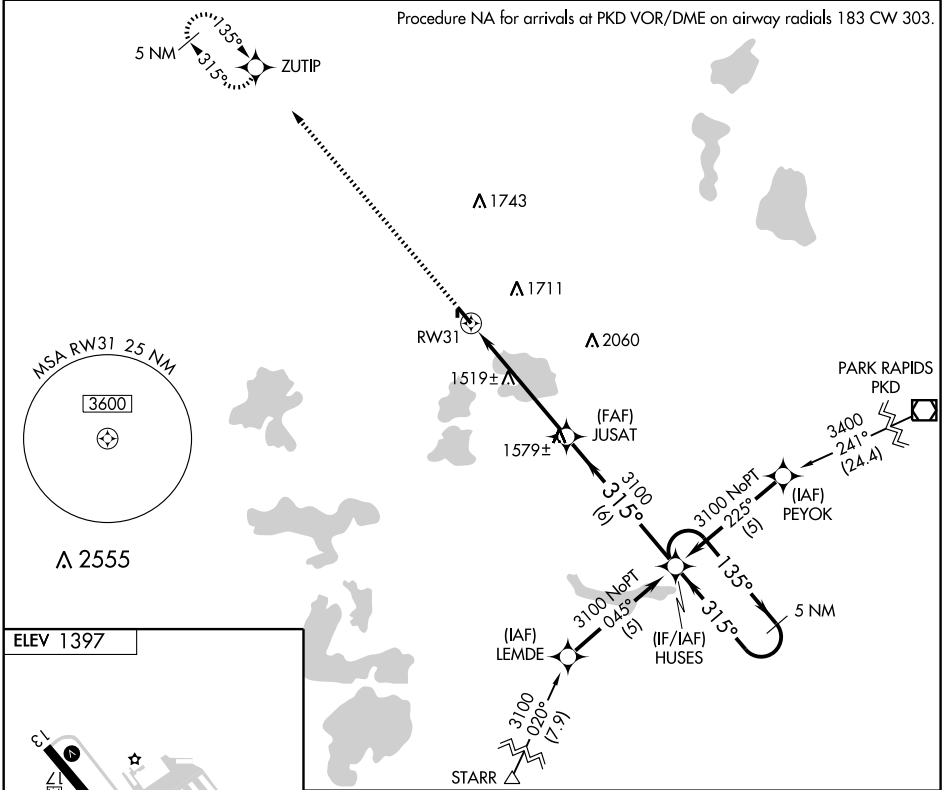
DETROIT LAKES-WETHING FIELD (DTL)

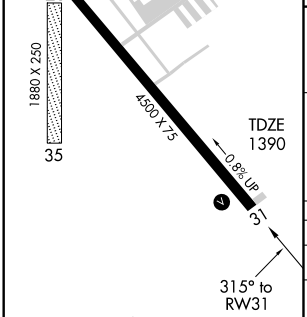
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.
VDP NA when using Park Rapids altimeter setting.
If local altimeter setting not received, use Park Rapids altimeter setting and increase DA/MDAs 100 feet.

MISSED APPROACH: Climb to 3100 direct ZUTIP and hold.

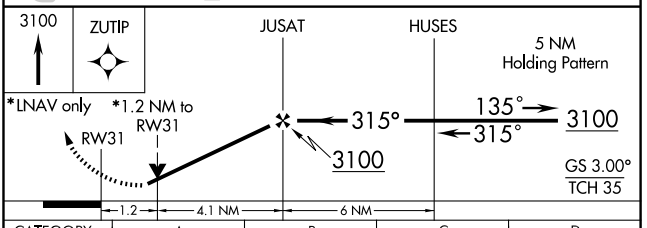
AWOS-3	PRINCETON RADIO	UNICOM
111.2	122.5	122.8 (CTAF) L

Procedure NA for arrivals at PKD VOR/DME on airway radials 183 CW 303.





MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L



CATEGORY	A	B	C	D
LPV DA	1654-1 264 (300-1)			
LNAV MDA	1780-1 390 (400-1)			1780-1¼ 390 (400-1¼)
CIRCLING	1880-1 483 (500-1)	1940-1 543 (600-1)	1940-1½ 543 (600-1½)	2080-2¼ 683 (700-2¼)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME DTL	APP CRS	Rwy Idg	4500
111.2	142°	TDZE	1396
Chan 49		Apt Elev	1396

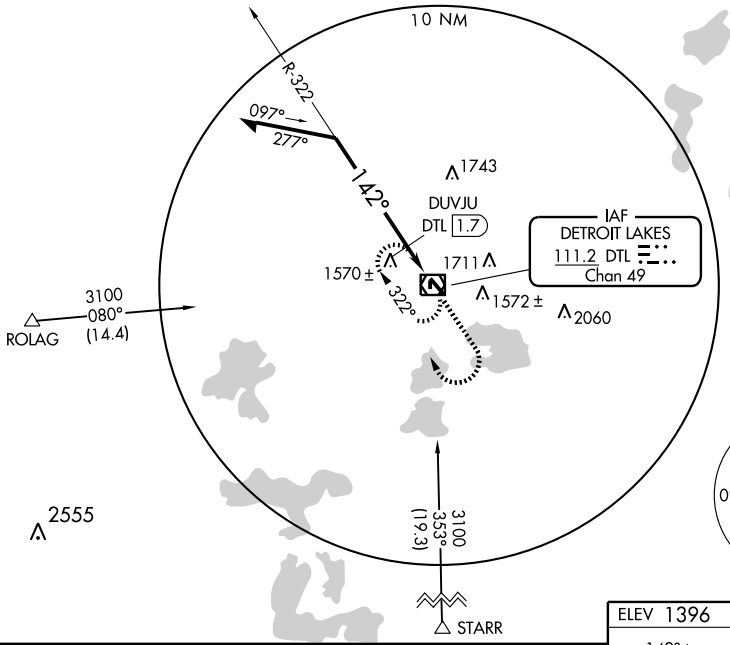
VOR RWY 13

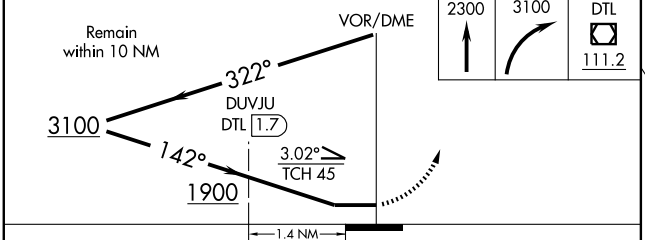
DETROIT LAKES-WETHING FIELD (DTL)

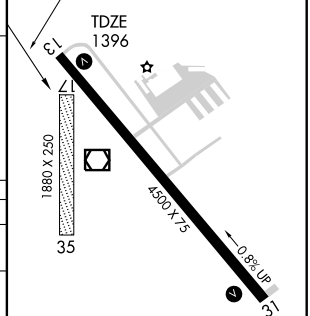
NA

MISSED APPROACH: Climb to 2300 then climbing right turn to 3100 direct DTL VOR/DME and hold.

AWOS-3	PRINCETON RADIO	UNICOM
111.2	122.5	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-13	1900-1 504 (600-1)		1900-1½ 504 (600-1½)	
CIRCLING	1900-1 504 (600-1)	1940-1 544 (600-1)	1940-1½ 544 (600-1½)	2080-2¼ 684 (700-2¼)
DUVJU FIX MINIMUMS				
S-13	1820-1 424 (500-1)		1820-1¼ 424 (500-1¼)	
CIRCLING	1880-1 424 (500-1)	1940-1 544 (600-1)	1940-1½ 544 (600-1½)	2080-2¼ 684 (700-2¼)

MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME DTL	APP CRS	Rwy Idg	4500
111.2	310°	TDZE	1388
Chan 49		Apt Elev	1396

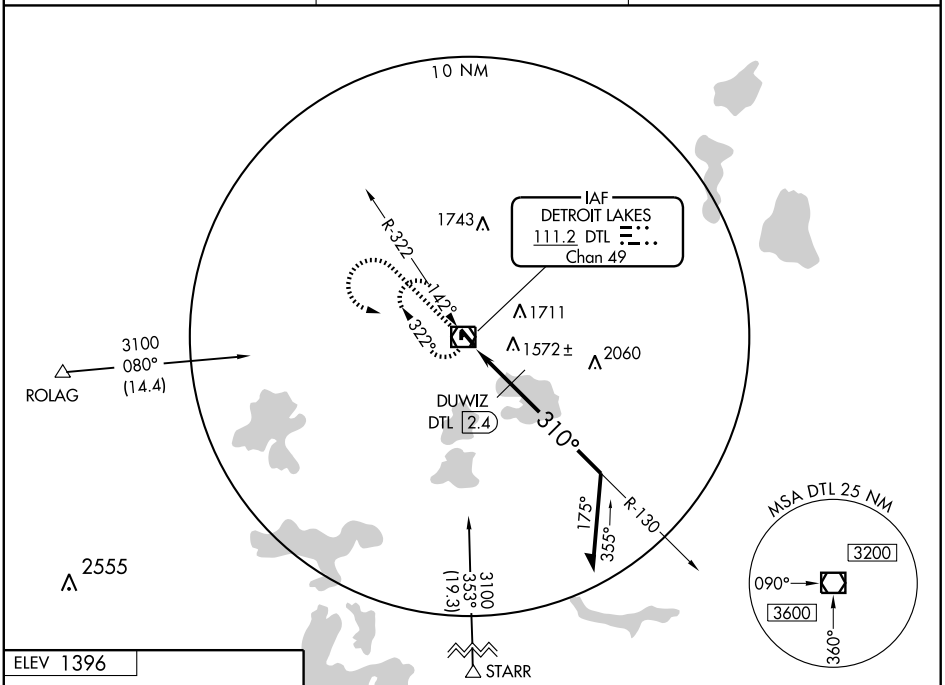
VOR RWY 31

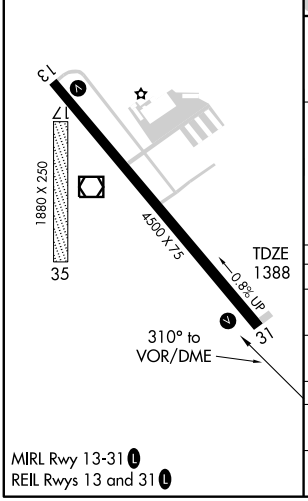
DETROIT LAKES-WETHING FIELD (DTL)

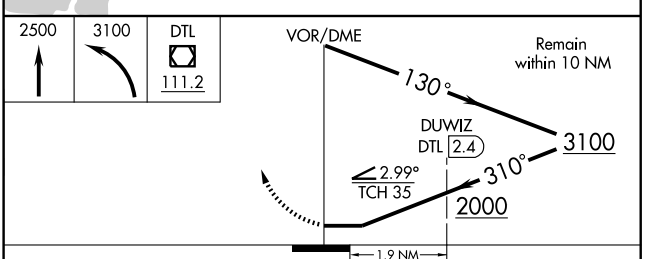
NA

MISSED APPROACH: Climb to 2500 then climbing left turn to 3100 direct DTL VOR/DME and hold.

AWOS-3	PRINCETON RADIO	UNICOM
111.2	122.5	122.8 (CTAF) L





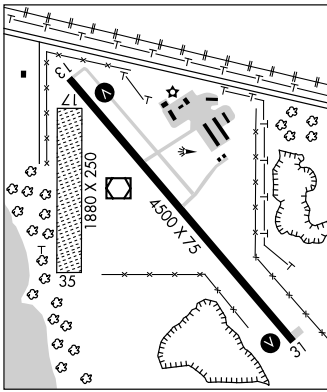


CATEGORY	A	B	C	D
S-31	2000-1 612 (700-1)		2000-1¾ 612 (700-1¾)	2000-2 612 (700-2)
CIRCLING	2000-1 604 (700-1)		2000-1¾ 604 (700-1¾)	2080-2¼ 684 (700-2¼)
DUWIZ FIX MINIMUMS				
S-31	1880-1 492 (500-1)		1880-1¼ 492 (500-1¼)	1880-1½ 492 (500-1½)
CIRCLING	1880-1 484 (500-1)	1940-1 544 (600-1)	1940-1½ 544 (600-1½)	2080-2¼ 684 (700-2¼)

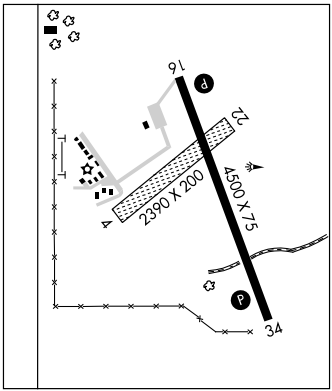
MIRL Rwy 13-31 L
REIL Rwys 13 and 31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

DETROIT LAKES–WETHING FLD (DTL) 2 W UTC−6(−5DT) N46°49.51′ W95°53.14′ **TWIN CITIES**
1397 B S4 **FUEL** 100LL, JET A TPA—2197(800) NOTAM FILE DTL **L–14H**
RWY 13–31: H4500X75 (ASPH) S–23, D–42 MIRL 0.8% up NW **IAP**
RWY 13: REIL. VASI(V4L)—TCH 45′. Road.
RWY 31: REIL. VASI(V4L)—TCH 35′. Trees.
RWY 17–35: 1880X250 (TURF)
RWY 35: Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–0000Z‡, Sat 1500–2200Z‡. Self svc avbl 24 hrs. Ultralights on and invof arpt. Rwy 17–35 CLOSED winter months. Rwy 17–35 marked with cones. Rwy 13 and Rwy 31 omnidirectional REIL. ACTIVATE MIRL Rwy 13–31 and REIL Rwy 13 and Rwy 31 and VASI Rwy 13 and 31—CTAF.
WEATHER DATA SOURCES: AWOS–3 111.2 DTL (218) 847–8626.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.5 (PRINCETON RADIO)
RADIO AIDS TO NAVIGATION: NOTAM FILE DTL.
(T) VORW/DME 111.2 DTL Chan 49 N46°49.54′ W95°53.23′ at fld. 1387/5E. **AWOS–3**. Unmonitored.



DODGE CENTER (TOB) 1 SE UTC−6(−5DT) N44°01.08′ W92°49.90′ **GREEN BAY**
1305 B S4 **FUEL** 100LL NOTAM FILE TOB **L–12J**
RWY 16–34: H4500X75 (CONC) MIRL **IAP**
RWY 16: REIL. PAPI(P4L)—GA 3.0° TCH 28′. Trees.
RWY 34: REIL. PAPI(P4L). —GA 3.0° TCH 40′.
RWY 04–22: 2390X200 (TURF)
RWY 04: Road. **RWY 22:** Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Self svc fuel avbl with credit card. Rwy 04–22 CLOSED winter months. Ultralight tfc on and invof arpt. Windmills 1.5 miles SW of arpt. Rwy 04–22 marked with yellow cones. MIRL Rwy 16–34 preset on low ints, to increase ints and ACTIVATE REIL and PAPI Rwy 16 and Rwy 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.075 (507) 374–6369.
COMMUNICATIONS: CTAF 122.9
Ⓡ **ROCHESTER APP/DEP CON** 119.8 (1100–0400Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.35 (0400–1100Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE RST.
ROCHESTER (L) VORW/DME 112.0 RST Chan 57 N43°46.97′ W92°35.82′ 319° 17.4 NM to fld. 1389/5E. **HIWAS.**



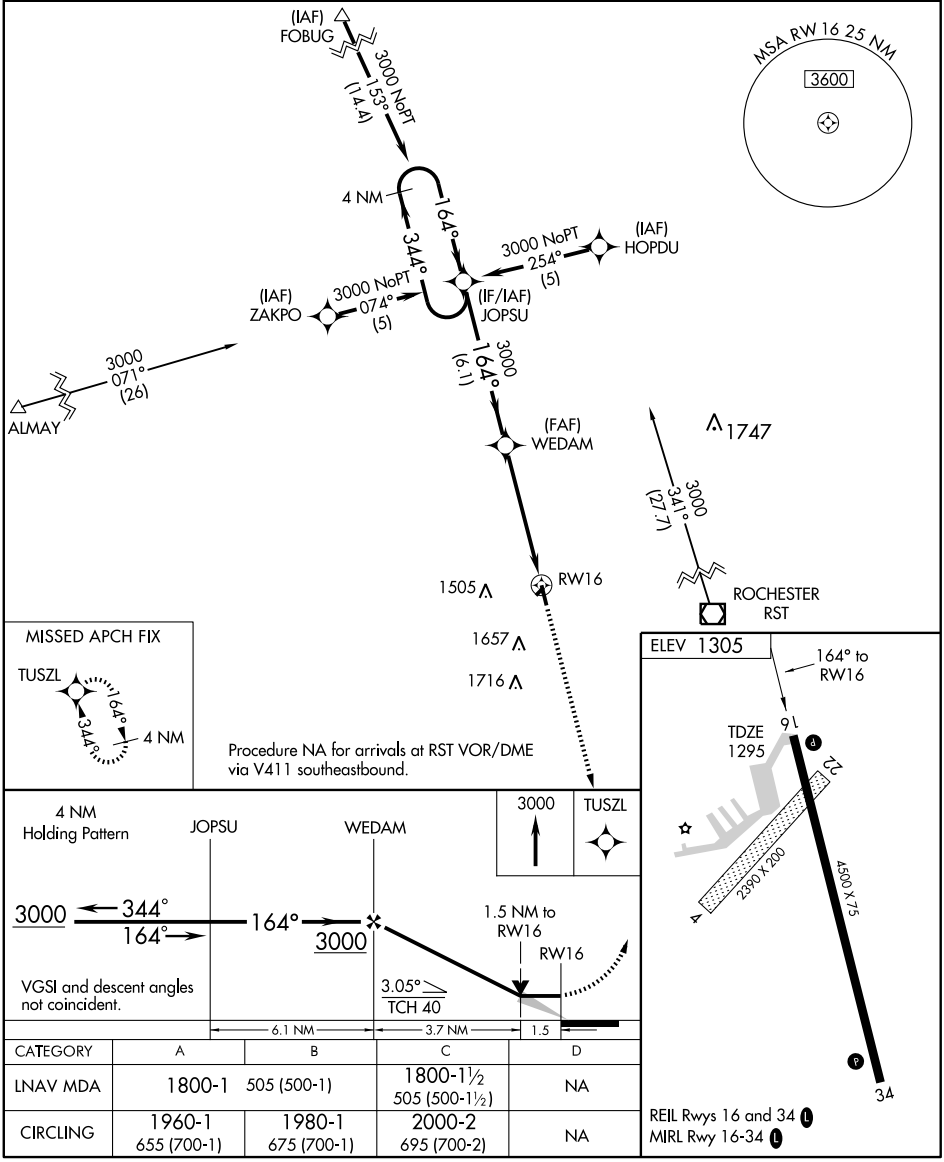
APP CRS	Rwy Idg	4500
164°	TDZE	1295
	Apt Elev	1305

RNAV (GPS) RWY 16
DODGE CENTER (TOB)

DME/DME RNP- 0.3 NA.
VDP NA with Rochester Intl altimeter setting.
When local altimeter setting not received, use Rochester Intl altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climb to 3000 direct TUSZL and hold.

AWOS-3	ROCHESTER APP CON ★	CTAF
119.075	119.8 251.125	122.9 L



CATEGORY	A	B	C	D
LNAV MDA	1800-1 505 (500-1)		1800-1½ 505 (500-1½)	NA
CIRCLING	1960-1 655 (700-1)	1980-1 675 (700-1)	2000-2 695 (700-2)	NA

REIL Rwys 16 and 34 L
MIRL Rwy 16-34 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 34

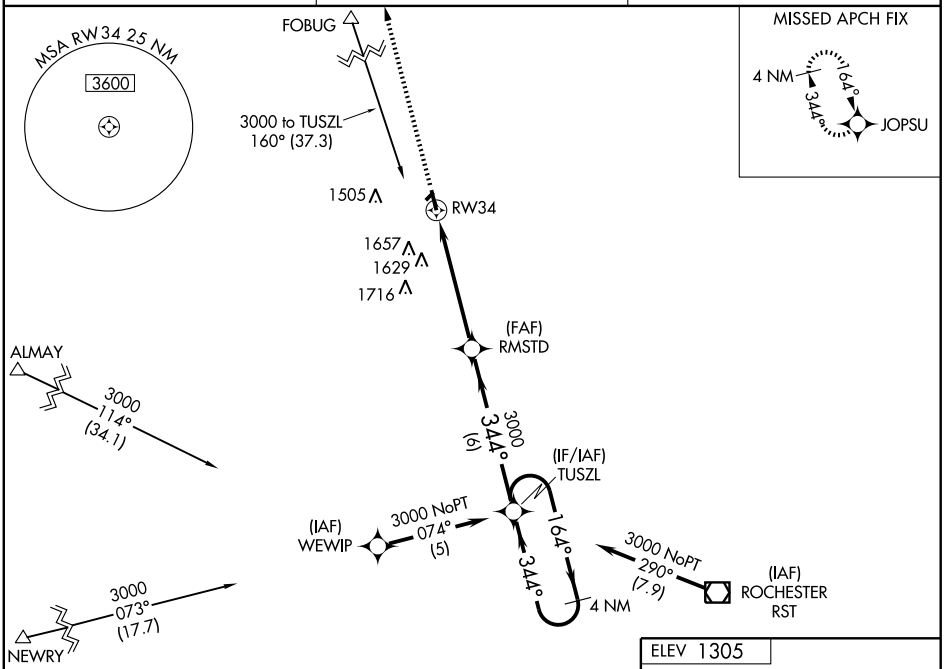
DODGE CENTER (TOB)

APP CRS	Rwy Idg	4500
344°	TDZE	1305
	Apt Elev	1305

DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Rochester Intl altimeter setting and increase all MDA 40 feet, LNAV Cat C visibility ¼ mile.
VDP NA with Rochester Intl altimeter setting.

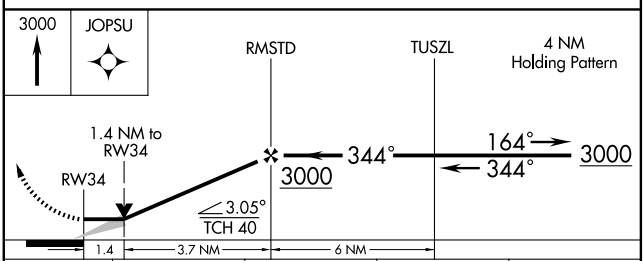
MISSED APPROACH: Climb to 3000 direct JOPSU and hold.

AWOS-3	ROCHESTER APP CON ★	CTAF
119.075	119.8 251.125	122.9 (L)

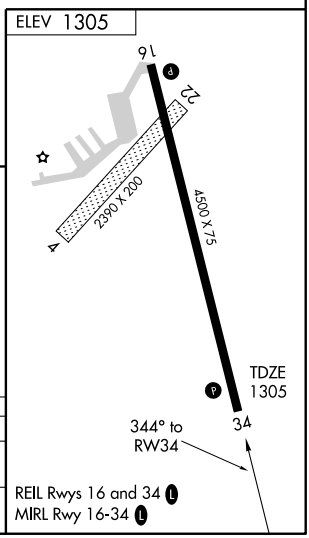


Procedure NA for arrivals at RST VOR/DME via V411 southeastbound and arrivals at ALMAY via V505 northbound.

1868



CATEGORY	A	B	C	D
LNAV MDA	1780-1 475 (500-1)		1780-1¼ 475 (500-1¼)	NA
CIRCLING	1960-1 655 (700-1)	1980-1 675 (700-1)	2000-2 695 (700-2)	NA



NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME RST	APP CRS	Rwy Idg	N/A
112.0	319°	TDZE	N/A
Chan 57		Apt Elev	1305

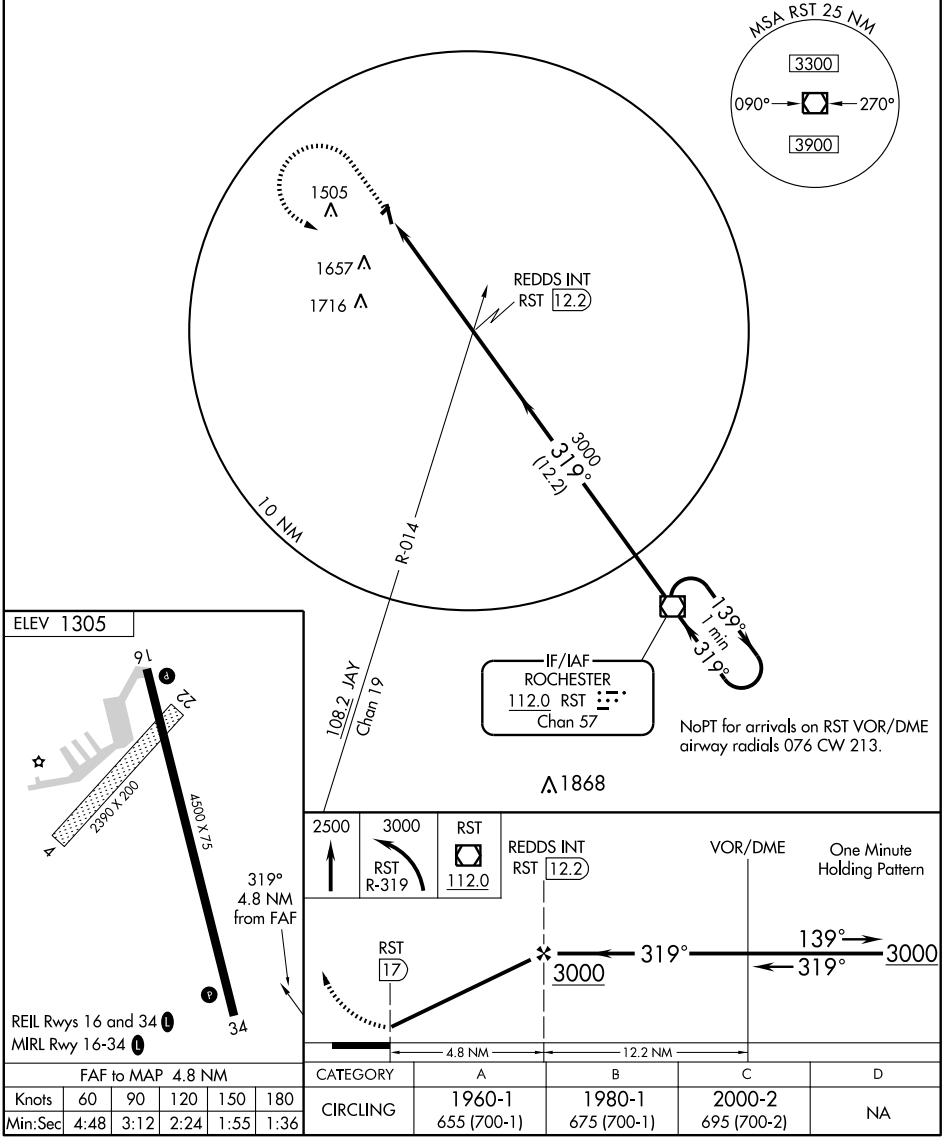
VOR-A
DODGE CENTER (TOB)

When local altimeter setting not received, use Rochester Intl altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climb to 2500 then climbing left turn to 3000 via RST VOR/DME R-319 to RST VOR/DME and hold.

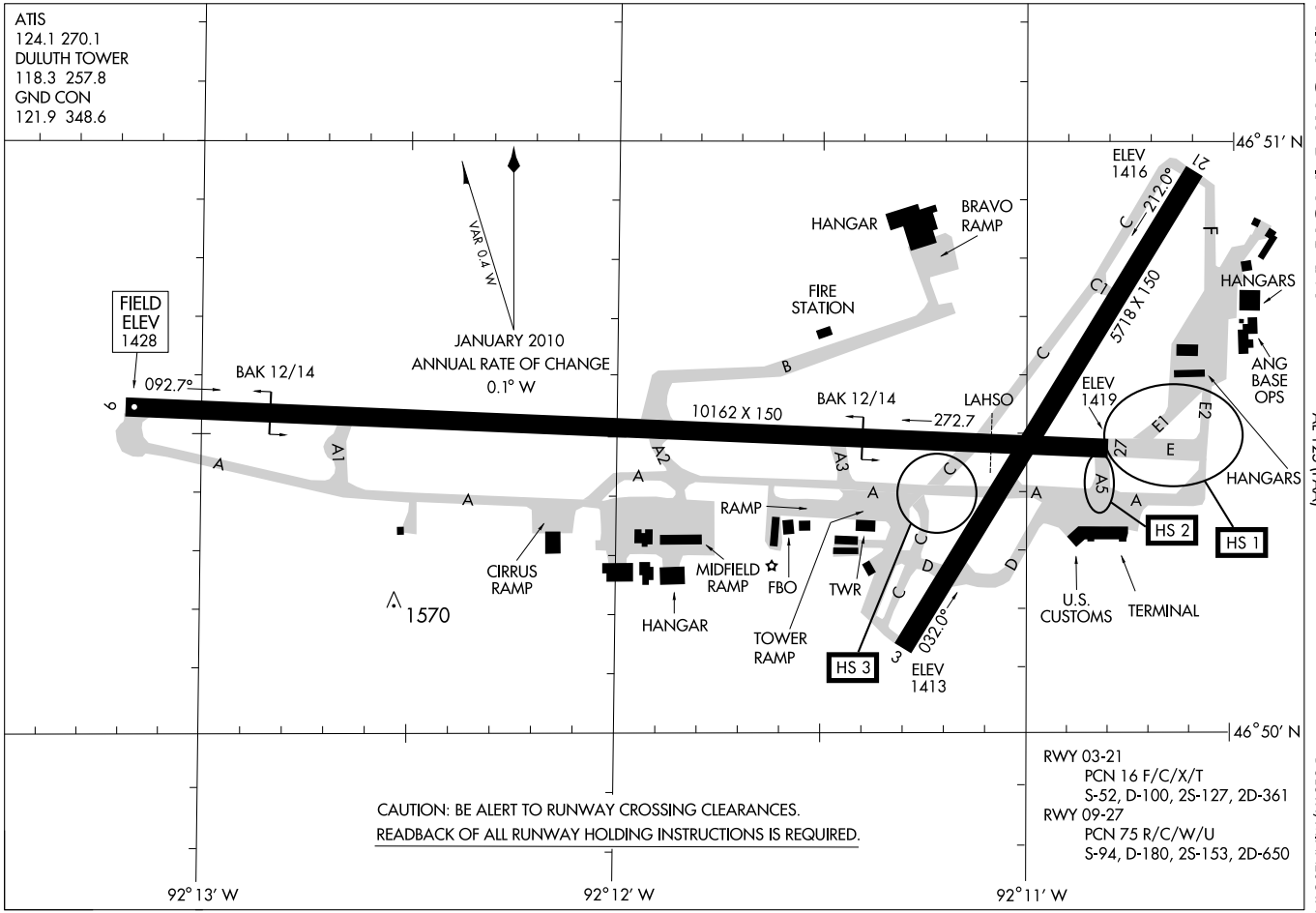
AWOS-3	ROCHESTER APP CON ★	CTAF
119.075	119.8 251.125	122.9 L

NC-1, 21 OCT 2010 to 18 NOV 2010



FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

CATEGORY	A	B	C	D
CIRCLING	1960-1 655 (700-1)	1980-1 675 (700-1)	2000-2 695 (700-2)	NA



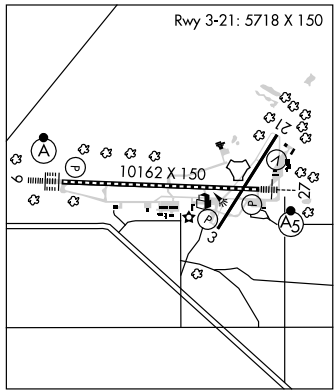
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

RWY 03-21
PCN 16 F/C/X/T
S-52, D-100, 2S-127, 2D-361
RWY 09-27
PCN 75 R/C/W/U
S-94, D-180, 2S-153, 2D-650

DULUTH

DULUTH INTL (DLH)(KDLH) CIV/MIL/ANG 5 NW UTC−6(−5DT) N46°50.53′ W92°11.62′ **GREEN BAY**
1428 B S4 **FUEL** 100LL, JET A1 OX 1, 2, 3, 4 AOE Class I, ARFF Index B **H–2I, L–14I**
NOTAM FILE DLH **IAP, DIAP, AD**

RWY 09–27: H10162X150 (CONC–GRVD) S–94, D–180, 2S–153, 2D–650 PCN 75 R/C/W/U HIRL CL
RWY 09: ALSF2. PAPI(P4L)—GA 3.0° TCH 50′. Tree.
RWY 27: MALSR. TDZL. PAPI(P4L)—GA 3.0° TCH 96′.
RWY 03–21: H5718X150 (ASPH–GRVD) S–52, D–100, 2S–127, 2D–361 PCN 16 F/C/X/T HIRL
RWY 03: REIL. PAPI(P4L)—GA 3.0° TCH 39′. Tree.
RWY 21: REIL. VASI(V4L)—GA 3.0° TCH 40′.



LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 09	03–21	8950

ARRESTING GEAR/SYSTEM
RWY 09 ←BAK–14 BAK–12B(B) (1500′)
BAK–14 BAK–12B(B) (2260′) →**RWY 27**

MILITARY SERVICE: JASU 9(AM32A–60) 2(A/M32A–86) 2(MC–11) 6(MC–2A)(Mil). **FUEL** 100LL, Jet A, (Tran acft svcs avbl continuously–Monaco Air Duluth, call C612–726–5700). **FLUID** SP LOX LHNIT(Mil), SP De–Ice LHOX LHNIT. (MONACO AIR DULUTH). **OIL** O–148(Mil). JOAP

AIRPORT REMARKS: Attended continuously. Deer and birds on and invof arpt. High speed military jet traffic at 3000′ to 3300′ MSL in area. Rwy 03–21 poor condition with potential for debris. Rwy 09–27 appears to be the most affected area. Rwy 09–27 and north segment of Rwy 03–21 ungrooved. Landing fee for all commercial acft and all acft over 10000 pounds. When Rwy 03–21 is in use Twy C North of Rwy 09–27 may be restricted by air traffic control to acft with wingspans less than 49′. Windshear/downdrafts final apch Rwy 27. Twy C south of Twy A clsd winter months. Twy A4 clsd indef. Flight Notification Service (ADCUS) available.

MILITARY REMARKS: CAUTION: Bird hazard (phase II conditions) exists during 1 Sep through 31 Oct. Ctc SOF/Comd Post for info. J8 avbl at both civilian and military fueling facilities. **ANG** Opr Mon–Fri 1200–2130Z‡ except holidays. Ltd opr hr and tran svc avbl. Ctc Comd Post DSN 825–7370/71, C218–788–7370/71. Tran acft may not be svc when wind chill exceeds or is forecast to exceed −30° F. For rwy condition reading info, afld status and crash rescue capability ctc Comd Post or Twr.

WEATHER DATA SOURCES: ASOS (C218) 723–8340.

COMMUNICATIONS: ATIS 124.1 270.1 **UNICOM** 122.95 **PTD** 288.9
RCO 122.35 (PRINCETON RADIO)
Ⓡ **APP/DEP CON** 125.45 255.9 (1200–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.9 (0500–1200Z‡)
TOWER 118.3 257.8 **GND CON** 121.9 348.6
ANG COMD POST 288.9 (6735 LSB)

RADIO AIDS TO NAVIGATION: NOTAM FILE DLH.
(H) VORTACW 112.6 DLH Chan 73 N46°48.13′ W92°12.17′ 004° 2.4 NM to fld. 1428/5E. VOR unusable:
233°–261° blo 10,000′.
LAKESIDE (H) TACAN LKI (135.4) Chan 11 N46°50.63′ W92°11.16′ at fld. 1424/5E. Opr Tue–Fri 1300–0400Z‡, Mon and Sat 1300–2200Z‡. No NOTAM MP Thu 1400–1600Z‡.
PYKLA NDB (MHW/LOM) 379 DL N46°50.74′ W92°21.30′ 089° 6.6 NM to fld. NDB unmonitored.
ILS 110.3 I–DLH Rwy 09. LOM PYKLA NDB. LOM unmonitored.
COPTER ILS 110.3 I–DLH Rwy 09.
ILS 108.7 I–JUD Rwy 27. LOC unusable byd 25° left and right of course. GS unusable for coupled approaches blo 2550′ MSL.
COPTER ILS 108.7 I–JUD Rwy 27.
ASR

COMM/NAV/WEATHER REMARKS: LAKESIDE TACAN CAUTION—Do not select Chan 73 DLH for Chan 11 LKI. Twr 2049′ on radial 099 Ch 73 DLH. Radar See Terminal Flip for Radar Minima.

LOC I-JUD	APP CRS	Rwy Idg	10162
108.7	270°	TDZE	1421
		Apt Elev	1428

COPTER ILS or LOC RWY 27

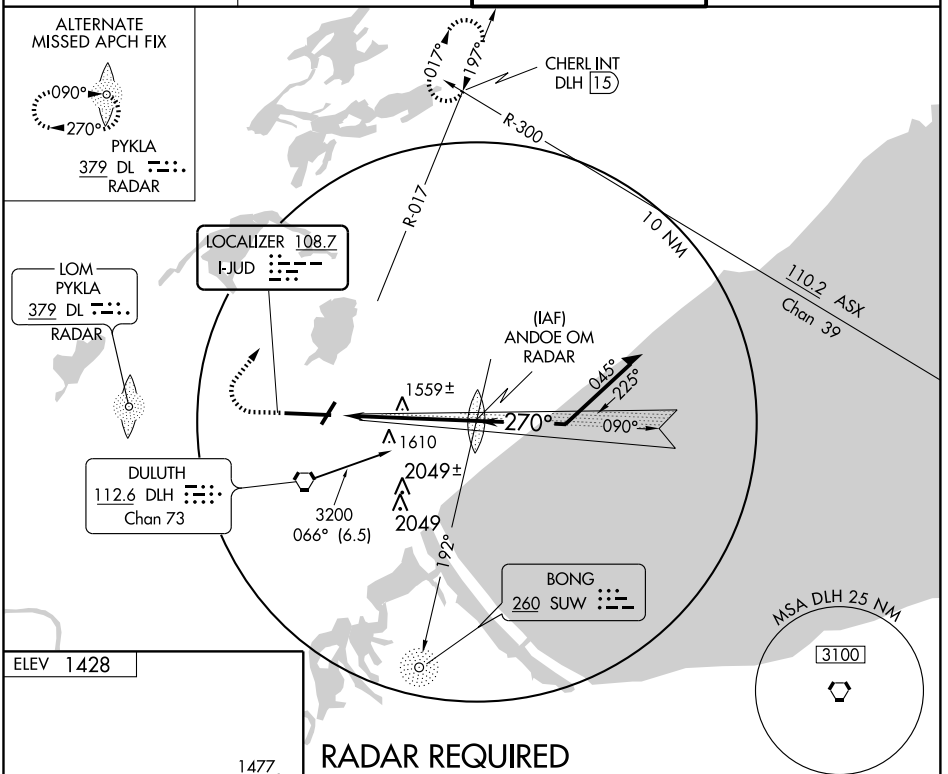
DULUTH INTL (DLH)

ASR — Inoperative table does not apply to H-ILS 27. For inoperative MALSR, increase H-LOC 27 visibility to RVR 2400.

MALSR

MISSED APPROACH: Climb to 3000 then climbing right turn to 4500 via heading 060° and DLH VORTAC R-017 to CHERL Int/DLH 15 DME and hold.

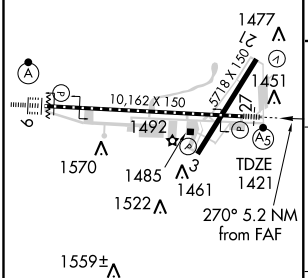
ATIS	DULUTH APP CON ★	DULUTH TOWER	GND CON
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6



NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

ELEV 1428



TDZ/CL Rwy 9 and 27
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

FAF to MAP 5.2 NM					
Knots	45	60	75	90	105
Min:Sec	6:56	5:12	4:10	3:28	2:58

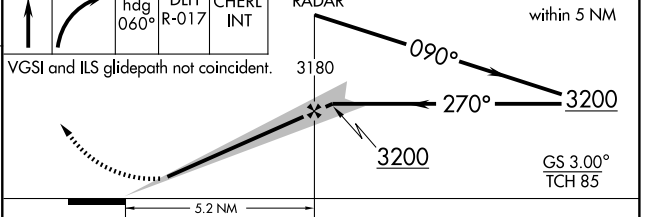
RADAR REQUIRED

3000	4500	hdg 060°	DLH R-017	CHERL INT

ANDOE OM RADAR

Remain within 5 NM

VGSI and ILS glidepath not coincident.



CATEGORY	COPTER	B	C	D
H-ILS 27	1621/20 200 (200-½)	NA		
H-LOC 27	1820/12 399 (400-¼)	NA		
CIRCLING		NA		

COPTER ILS RWY 9

LOC I-DLH	APCH CRS	Rwy ldg 10,162 / TDZE 1428 / Arpt Elev 1428
110.3	090°	

AL-125 [USAF]

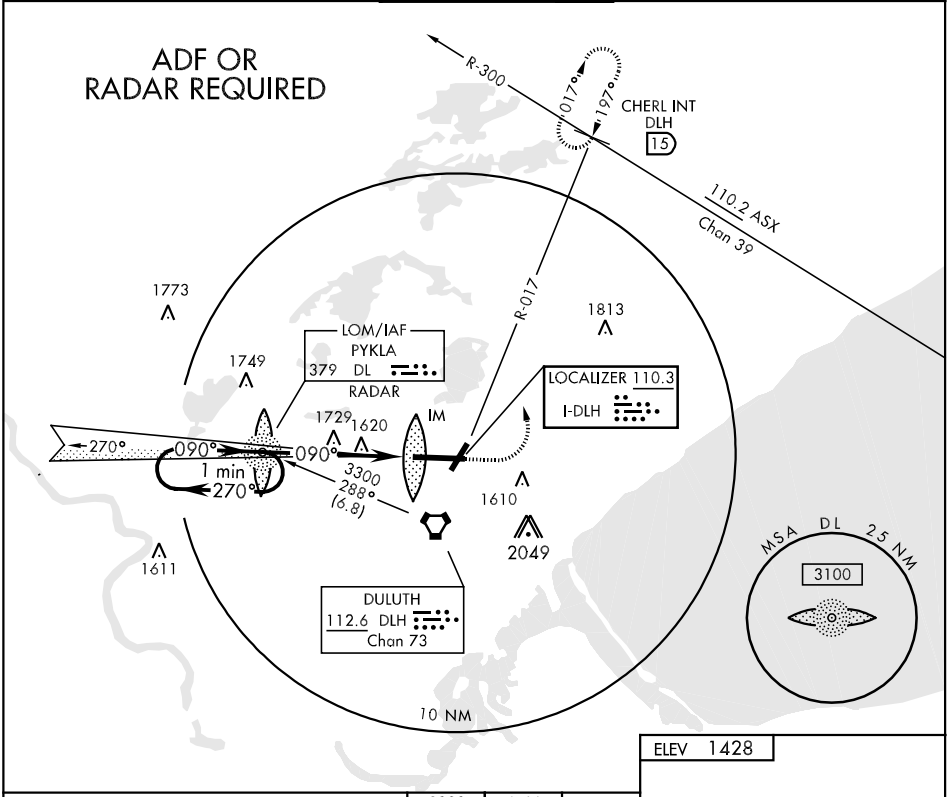
DULUTH INTL (KDLH)

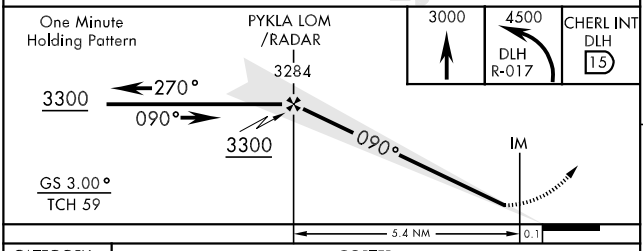
* When ALS inop, increase RVR to 24 and vis to ½ mile.

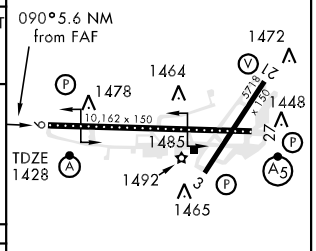
ALSF-2

MISSED APPROACH: Climb to 3000 then climbing left turn to 4500 via DLH R-017 to CHERL INT/DLH 15 DME and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON	ASR
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6	







CATEGORY	COPTER		
S-ILS 9 *	1628/12	200	(200-¼)
S-LOC 9 *	1880/12	452	(500-¼)
CIRCLING	NOT AUTHORIZED		

TDZL/CL Rwy 9
REIL Rwy 3 and 21
HIRL Rwy 3-21 and 9-27

FAF to MAP 5.6 NM

Knots	45	60	75	90	105
Min:Sec	7:28	5:36	4:29	3:44	3:12

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

TACAN LKI Chan 11	APCH CRS 082°	Rwy ldg 10,162 TDZE 1428 Arpt Elev 1428	JAL-125 [USAF]	DULUTH INTL (KDLH)

* Category E not authorized SE of Rwy 3 and Rwy 27.

ALSF-2

MISSED APPROACH: Climb to 2500 then climbing right turn to 4000 via LKI TACAN R-099 to MILOD 15 DME and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON	ASR
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6	

RADAR REQUIRED

2180

1849

LAKESIDE Chan 11 LKI

1810

1773

1749

1813

FLPPR LKI 15

R-262

082°

LR-254

LKI 7

1611

1610

2049

LKI 25

099°

279°

R-099

MILOD LKI 15

LKI 15 Arc

R-180

LKI 15

20 NM

1638

360°

(IAF) EMITT LKI 25

360°

180°

LKI 40

1637

CAUTION:
DO NOT SELECT CHANNEL 73 "DLH" FOR CHANNEL 11 "LKI". TOWERS 2049' ON R-099 CHANNEL 73 "DLH".

(b) 180 110 (a) 290 (c) (c)

MSA LKI 25 NM 3100

EMERG SAFE ALT 100 NM 4100

2500	4000	MILOD LKI 15
	LKI R-099	

EMITT R-180 25

R-180 15

FLPPR R-262 15

FL180

360°

082°

7

2

TACAN

Arc 15

3300

5.0 NM

ELEV 1428

082° to TACAN

1472

1464

1478

1448

10,162 x 150

1485

TDZE 1428

1492

1465

CATEGORY	C	D	E
S-9	1880/40 452 (500-¾)	1880/50	452 (500-1)
CIRCLING *	1920-1½ 492 (500-1½)	1980-2	552 (600-2)

TDZL/CL Rwy 9
REIL Rwy 3 and 21
HIRL Rwy 3-21 and 9-27

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

TACAN	APCH CRS	Rwy ldg	TDZE	Arpt Elev
LKI Chan 11	279°	10,162	1421	1428

JAL-125 [USAF]

DULUTH INTL (KDLH)

* Category E not authorized SE of Rwy 3 and Rwy 27.

MALSR

MISSED APPROACH: Climb to 4000 via LKI TACAN R-262 to FLPPR 15 DME and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON	ASR
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6	

RADAR REQUIRED

2180

1849

1810

1773

1749

1611

1610

2049

1638

1637

LAKESIDE
Chan 11 LKI

FLPPR
LKI
15

LKI
6

MILOD
LKI
15

LKI
25

R-262

082°

262°

279°

R-099

LR-107

R-180

LKI
15
Arc

20 NM

360°

(IAF)
EMITT
LKI
25

180°

LKI
40

(b) 180 110 (a) 290 (c) (c)

CAUTION:
DO NOT SELECT CHANNEL 73 "DLH" FOR CHANNEL 11 "LKI". TOWERS 2049' ON R-099 CHANNEL 73 "DLH".

MSA LKI 25 NM
3100

EMERG SAFE ALT 100 NM 4100

4000
LKI
R-262

FLPPR
LKI
15

MILOD
R-099
15

R-180
15

EMITT
R-180
25

FL180

360°

279°

6

TACAN

1

Arc
15

3200

5.0 NM

ELEV 1428

279° to TACAN

1472

1464

1478

1448

1485

1492

1465

10,162 x 150

TDZE
1421

CATEGORY	C	D	E
S-27	1860/40 439 (500-¾)	1860/50	439 (500-1)
CIRCLING *	1920-1½ 492 (500-1½)	1980-2	552 (600-2)

TDZL/CL Rwy 9
REIL Rwy 3 and 21
HIRL Rwy 3-21 and 9-27

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
DULUTH, MN		
DULUTH INTL (DLH)	HS 1	Rwy 27 apch area.
	HS 2	Apch end of Rwy 27 located at Twy A5.
	HS 3	Rwy 21 via Twy A and Twy C complex int.
GRAND FORKS, ND		
GRAND FORKS INTL (GFK)	HS 1	Rwy 09L and Twy A int.
	HS 2	Rwy 17R and Twy B int.
MINNEAPOLIS, MN		
CRYSTAL (MIC)	HS 1	Short distance between rwys.
	HS 2	Short distance between rwys.
	HS 3	Short distance between rwys.
	HS 4	Int of Rwy 06R (sod) on Twy F.
	HS 5	Int of Rwy 24L (sod) on Twy D.
	HS 6	Multiple vehicle/pedestrian deviations occurrence.
	HS 7	Close proximity of Rwy 14R and Rwy 06R.
	HS 8	Rwy 24R proximity to Twy E and Twy B int.
MINNEAPOLIS, MN		
FLYING CLOUD (FCM)	HS 1	Hold position markings/sign proximity to Twy A.
	HS 2	Hold position markings/sign proximity to Twy A.
	HS 3	Hold position markings/sign proximity to Twy A.
	HS 4	Hold position markings/sign proximity to Twy A.
	HS 5	Hold position markings/sign proximity to Twy A.
	HS 6	Hold position markings/sign proximity to Twy A.
	HS 7	Hold position markings/sign proximity to Twy A.
	HS 8	Hold position markings/sign proximity to Twy A.
	HS 9	Rwy 18 apch area along Twy A.
	HS 10	Proximty of parallel rwys and holding positions.
	HS 11	Short distance between rwy hold short lines.
MINNEAPOLIS, MN		
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN (MSP)	HS 1	Complex int of Twy A, Twy B, Twy C, Twy D, and Twy H in near proximity to Rwy 12R-30L and Rwy 04-22.
	HS 2	Complex twy/rwy geometry.
	HS 3	Complex int of Twy C, Twy D, Twy P, and Twy Q in near proximity to Rwy 12L-30R and Rwy 04-22.
	HS 4	Complex geometry at Rwy 04 apch end.
SIOUX FALLS, SD		
JOE FOSS FIELD (FSD)	HS 1	Complex twy int in close proximity of rwys.

21 OCT 2010 to 18 NOV 2010

21 OCT 2010 to 18 NOV 2010

*See appropriate A/FD, Alaska or Pacific Supplement HOT SPOT table for additional information.

LOC I-DLH	APP CRS	Rwy Idg	10162
110.3	090°	TDZE	1428
		Apt Elev	1428

ILS or LOC RWY 9

DULUTH INTL (DLH)

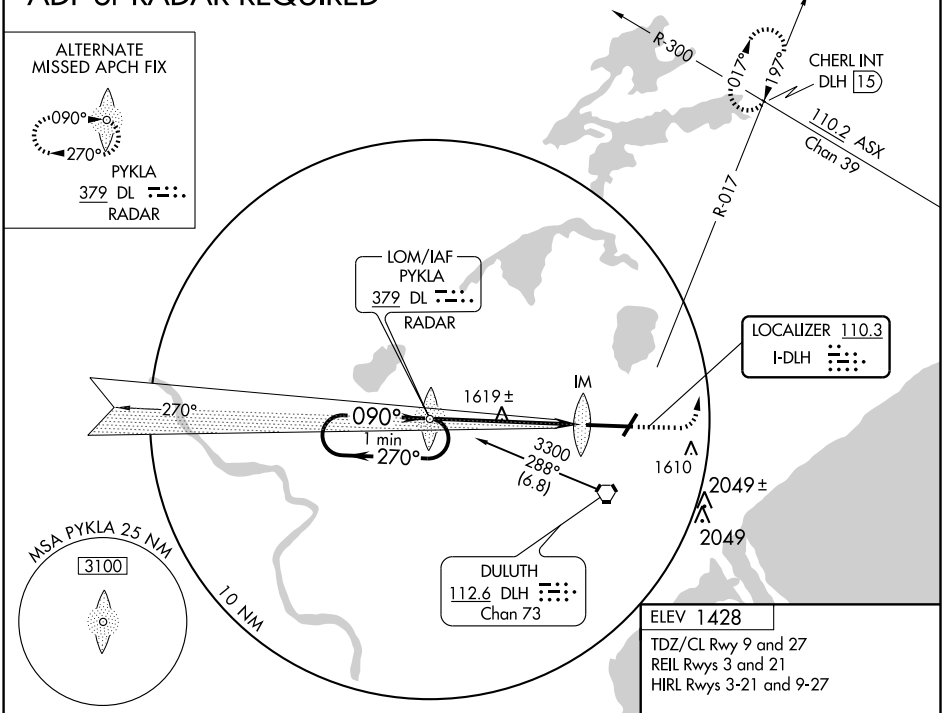
T A ASR — Cat E Circling NA southeast of Rwys 3 and 27. ADF or RADAR required. For inoperative ALSF, increase S-ILS 9 Cat E visibility to RVR 4000 and S-LOC 9 Cat E to 1½ miles.

ALSF-2

MISSED APPROACH: Climb to 3000 then climbing left turn to 4500 via heading 320° and DLH VORTAC R-017 to CHERL INT/DLH 15 DME and hold.

ATIS	DULUTH APP CON ★	DULUTH TOWER	GND CON
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6

ADF or RADAR REQUIRED



ELEV 1428

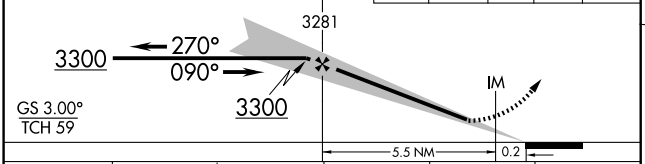
TDZ/CL Rwy 9 and 27
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

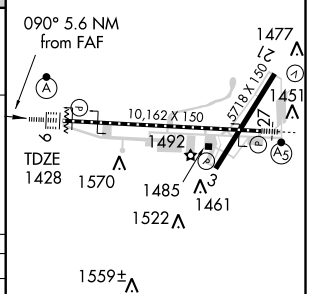
VGSI and ILS glidepath not coincident.

3000	4500	hdg 320°	DLH R-017	CHERL INT

One Minute Holding Pattern

PYKLA LOM RADAR





CATEGORY	A	B	C	D	E
S-ILS 9	1628/18 200 (200-½)				1628/24 200 (200-½)
S-LOC 9	1880/24 452 (500-½)		1880/40 452 (500-¾)	1880/50 452 (500-1)	
CIRCLING	1920-1 492 (500-1)		1920-1½ 492 (500-1½)	1980-2 552 (600-2)	2060-2½ 632 (700-2½)

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC I-JUD	APP CRS	Rwy Idg	10162
108.7	270°	TDZE	1421
		Apt Elev	1428

ILS or LOC RWY 27

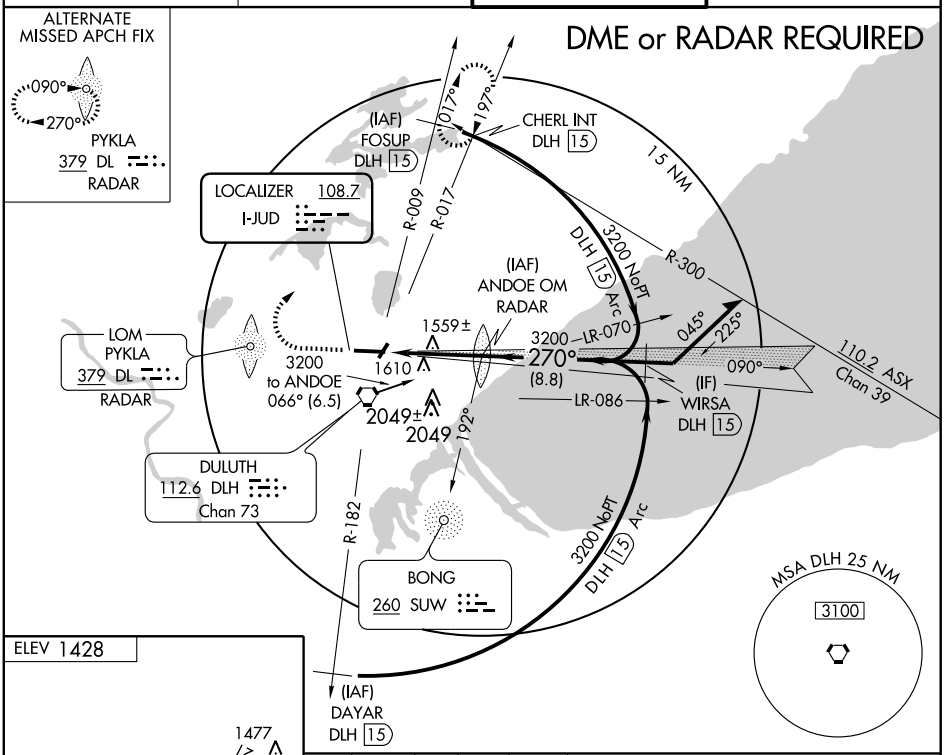
DULUTH INTL (DLH)

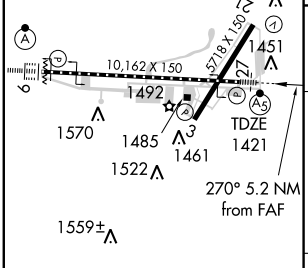
T A ASR — Inoperative table does not apply to S-ILS 27. For inoperative MALSR, increase S-LOC 27 Cat E visibility to 1½ mile. Cat E Circling NA SE of Rwys 3 and 27. Autopilot coupled approach NA below 2550.

MALSR

MISSED APPROACH: Climb to 3000 then climbing right turn to 4500 via heading 060° and DLH VORTAC R-017 to CHERL INT/DLH 15 DME and hold.

ATIS	DULUTH APP CON★	DULUTH TOWER	GND CON
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6



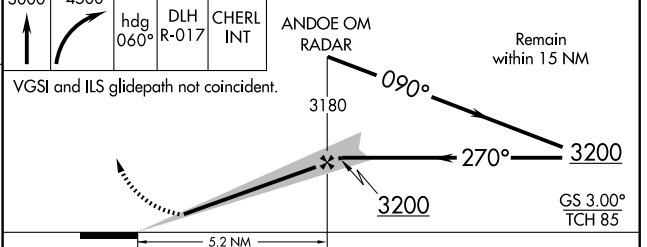


TDZ/CL Rwy 9 and 27
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

3000	4500	hdg 060°	DLH R-017	CHERL INT

VGSI and ILS glidepath not coincident.



CATEGORY	A	B	C	D	E
S-ILS 27	1621/40 200 (200-¾)		1651/40 230 (300-¾)		
S-LOC 27	1820/24 399 (400-½)			1820/40 399 (400-¾)	1820/50 399 (400-1)
CIRCLING	1920-1 492 (500-1)			1980-2 552 (600-2)	2060-2¼ 632 (700-2¼)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC I-DLH	APP CRS	Rwy Idg	10162
110.3	090°	TDZE	1428
		Apt Elev	1428

ILS RWY 9 (CAT II)

DULUTH INTL (DLH)

T A ASR — ADF or RADAR required.

ALSF-2

MISSED APPROACH: Climb to 3000 then climbing left turn to 4500 via heading 320° and DLH VORTAC R-017 to CHERL INT/DLH 15 DME and hold.

ATIS	DULUTH APP CON ★	DULUTH TOWER	GND CON
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6

ADF or RADAR REQUIRED

ALTERNATE MISSED APCH FIX

090° 270°

PYKLA

379 DL

RADAR

R-300 R-017 197° CHERL INT DLH 15

110.2 ASX Chan 39

R-017

LOM/IAF PYKLA

379 DL

RADAR

LOCALIZER 110.3 I-DLH

270° 090° 1 min 270° 1619± IM 3300 288° (6.8) 1610

2049 ± 2049

MSA PYKLA 25 NM 3100

10 NM

DULUTH 112.6 DLH Chan 73

ELEV 1428

VGSI and ILS glidepath not coincident.

One Minute Holding Pattern

PYKLA LOM RADAR

3000 4500 hdg 320° DLH R-017 CHERL INT

3281 DH RA 101 IM 1428 MSL

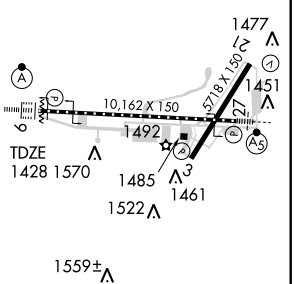
3300 270° 090° 3300

GS 3.00° TCH 59

5.5 NM 790' 1155'

CATEGORY	A	B	C	D
S-ILS 9	RA 101/12 100 DA 1528			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



TDZ/CL Rwy 9 and 27

REIL Rwys 3 and 21

HIRL Rwys 3-21 and 9-27

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	MEASURED DISTANCE
DULUTH, MN			
DULUTH INTL (DLH)	09	03-21	8,950 feet
GRAND FORKS, ND			
GRAND FORKS INTL (GFK)	27R	17R-35L	3,000 feet
	35L	09L-27R	4,600 feet
MINNEAPOLIS, MN			
MINNEAPOLIS-ST PAUL INTL/			
WOLD-CHAMBERLAIN (MSP)	22	TWY K	8,550 feet
	30L	TWY A9 TWY W9	8,150 feet
ROCHESTER, MN			
ROCHESTER INTL (RST)	02	13-31	5,850 feet
	13	02-20	5,270 feet
	31	02-20	3,200 feet

21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 3

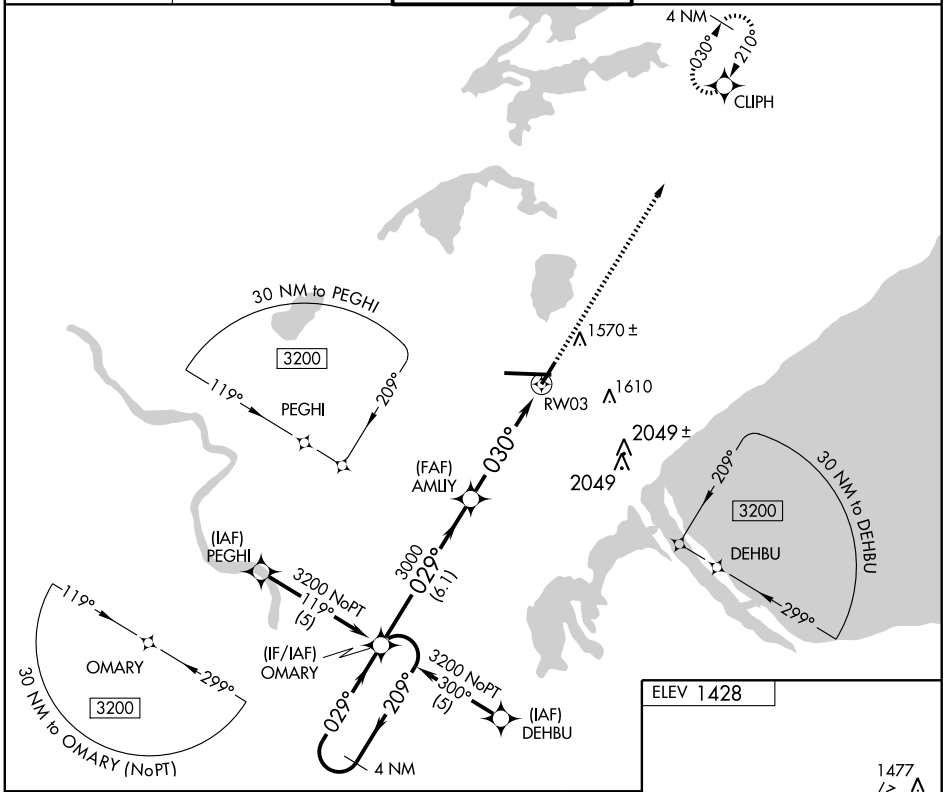
DULUTH INTL (DLH)

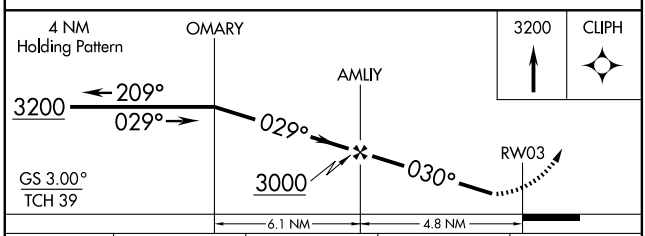
WAAS	APP CRS	Rwy Idg	5718
CH 82314	030°	TDZE	1420
W03A		Apt Elev	1428

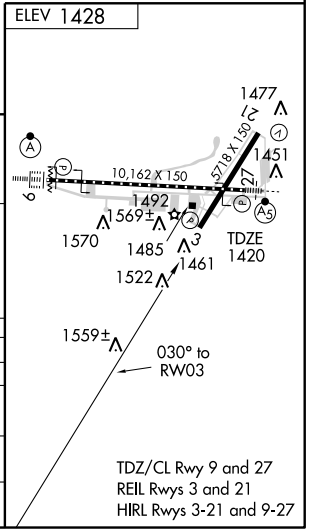
ASR For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3200 direct CLIPH and hold.

ATIS	DULUTH APP CON ★	DULUTH TOWER	GND CON
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6







CATEGORY	A	B	C	D
LPV DA	1824-1½ 404 (400-1½)			
LNAV/VNAV DA	1874-1¾ 454 (500-1¾)			
LNAV MDA	1820-1 400 (400-1)			1820-1¼ 400 (400-1¼)
CIRCLING	1920-1 492 (500-1)		1920-1½ 492 (500-1½)	1920-2 552 (600-2)

TDZ/CL Rwy 9 and 27
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	10162
CH 90502	090°	TDZE	1428
W09A		Apt Elev	1428

RNAV (GPS) RWY 9

DULUTH INTL (DLH)

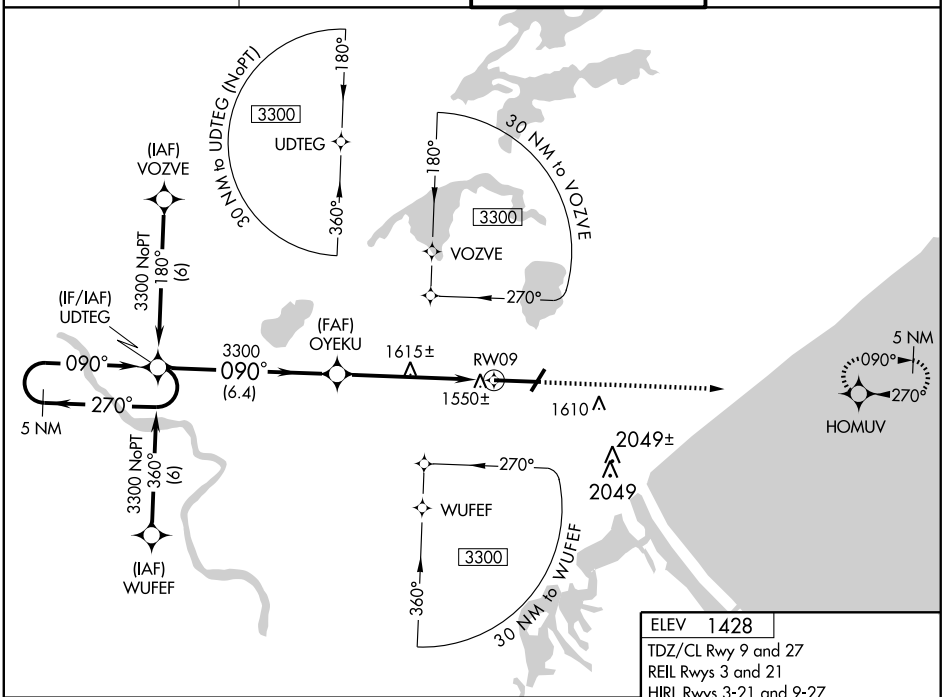
ASR

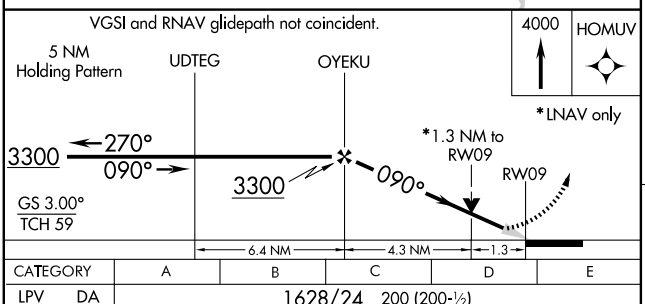
DME/DME RNP-0.3 NA. Circling NA for Cat. E SE of Rwys 3 and 27.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (115°F).
For inoperative ALSF-2, increase LPV Cat. E visibility to ¾, LNAV/VNAV all Cats visibility to 1½ and LNAV Cat. E visibility to 1½.

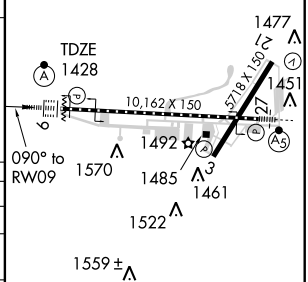
ALSF-2

MISSED APPROACH: Climb to 4000 direct HOMUV and hold.

ATIS	DULUTH APP CON ★	DULUTH TOWER	GND CON
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6







CATEGORY	A	B	C	D	E
LPV DA	1628/24 200 (200-½)				
LNAV/VNAV DA	1860/50 432 (500-1)				
LNAV MDA	1880/24 452 (500-½)		1880/40 452 (500-¾)	1880/50 452 (500-1)	
CIRCLING	1920-1½ 492 (500-1½)			1980-2 552 (600-2)	

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 21

DULUTH INTL (DLH)

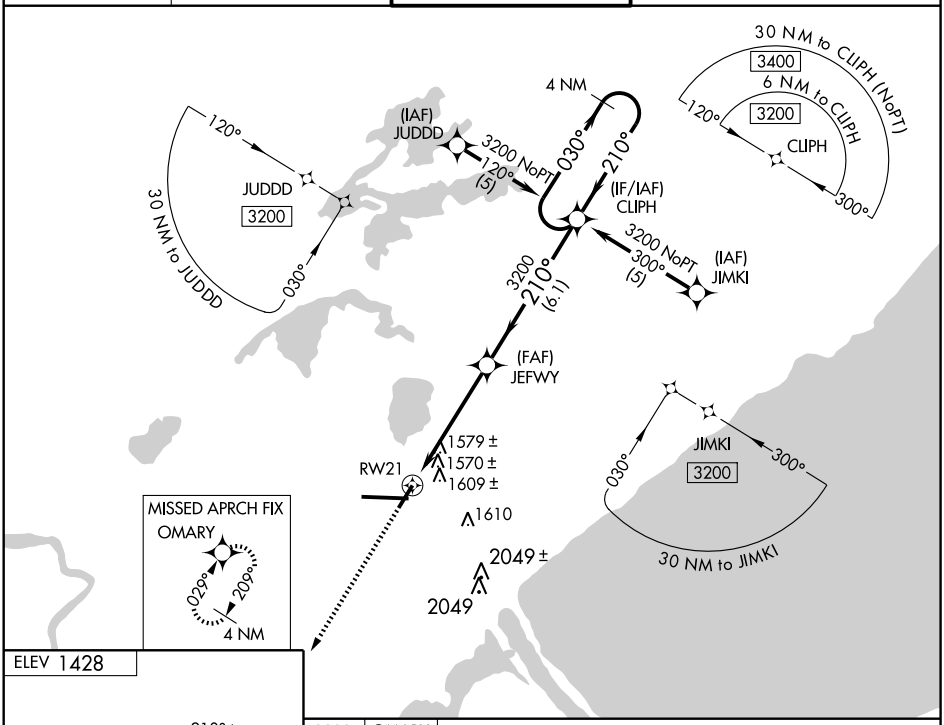
WAAS	APP CRS	Rwy Idg	5718
CH 40114	210°	TDZE	1420
W21A		Apt Elev	1428

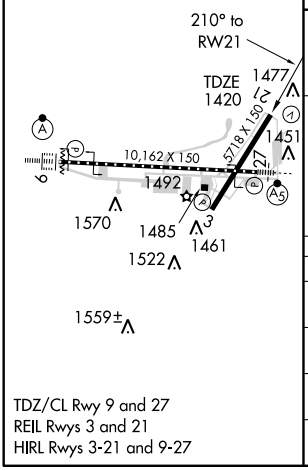
ASR

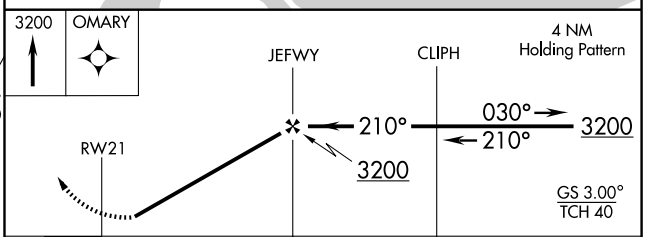
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3200 direct OMARY and hold.

ATIS	DULUTH APP CON *	DULUTH TOWER	GND CON
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6







CATEGORY	A	B	C	D
LPV DA	1708-1 288 (300-1)			
LNAV/VNAV DA	1927-1¾ 507 (500-1¾)			
LNAV MDA	1840-1 420 (500-1)		1840-1¼ 420 (500-1¼)	
CIRCLING	1920-1 492 (500-1)		1920-1½ 492 (500-1½)	1980-2 552 (600-2)

TDZ/CL Rwy 9 and 27
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	10162
CH 50502	270°	TDZE	1421
W27A		Apt Elev	1428

RNAV (GPS) RWY 27

DULUTH INTL (DLH)

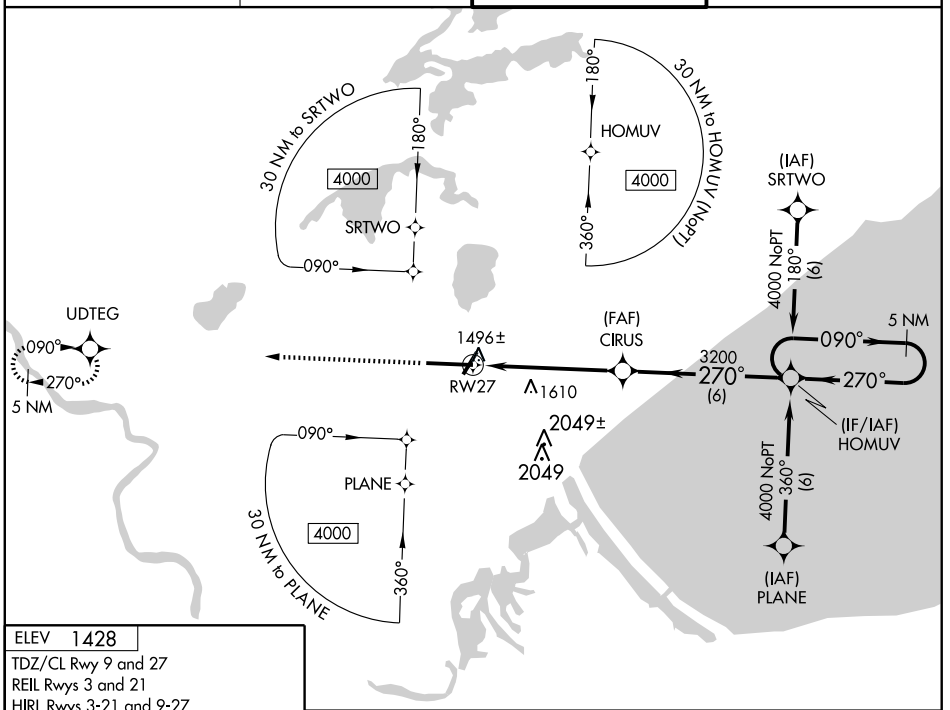
ASR

DME/DME RNP- 0.3 NA. Circling NA for Cat. E SE of Rwys 3 and 27.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (115°F).
For inoperative MALSR, increase LPV Cat. E visibility to RVR 4000, LNAV/VNAV Cat. E visibility to RVR 6000, and LNAV Cat. E visibility to 1¾.

MALSR

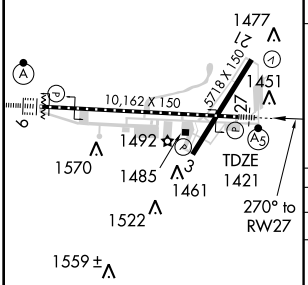
MISSED APPROACH: Climb to 3300 direct UDTEG and hold.

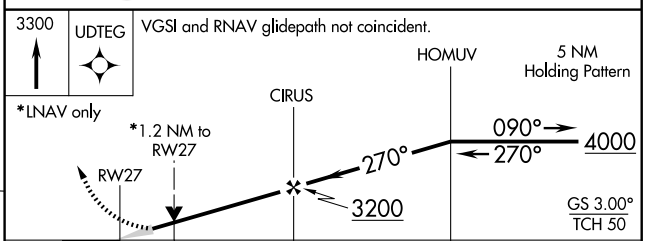
ATIS	DULUTH APP CON ★	DULUTH TOWER	GND CON
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6



ELEV 1428

TDZ/CL Rwy 9 and 27
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27





CATEGORY	A	B	C	D	E
LPV DA	1671/24 250 (300-½)				
LNAV/VNAV DA	1746/40 325 (400-¾)				
LNAV MDA	1900/24 479 (500-½)		1900/40 479 (500-¾)	1900/50 479 (500-1)	1900/60 479 (500-1¼)
CIRCLING	1920-1¼ 492 (500-1¼)		1920-1½ 492 (500-1½)	1980-2 552 (600-2)	

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

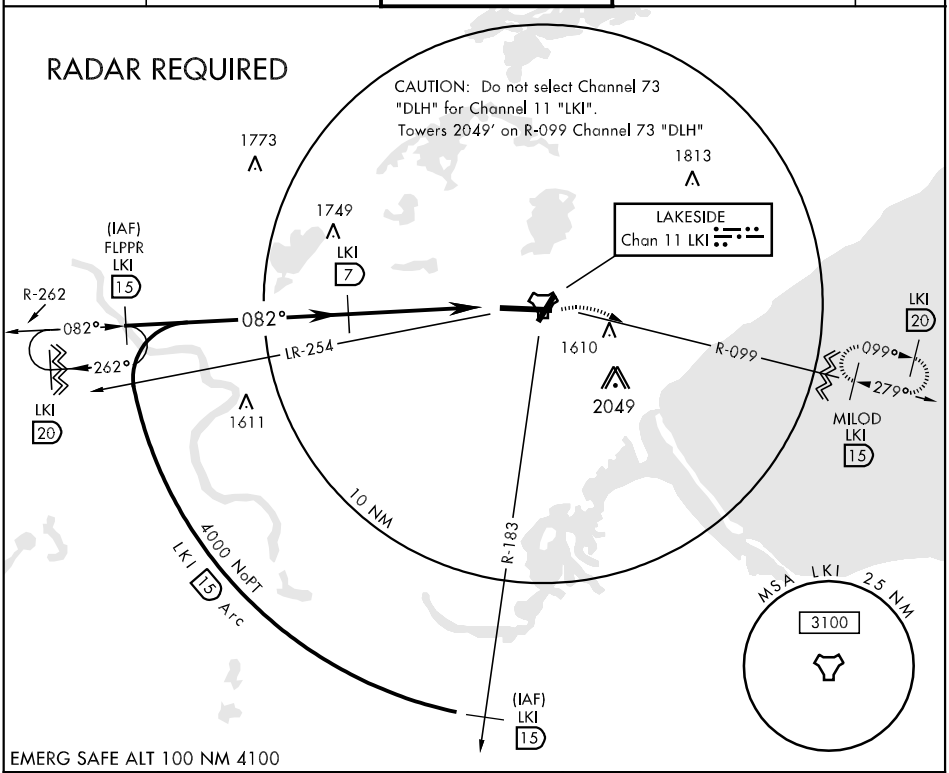
TACAN LKI Chan 11	APCH CRS 082°	Rwy ldg 10,162 TDZE 1428 Arpt Elev 1428	AL-125 [USAF]	DULUTH INTL (KDLH)

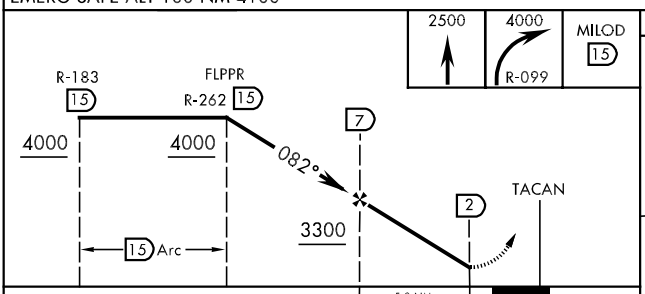
* Category E not authorized SE Rwy 3 and Rwy 27.

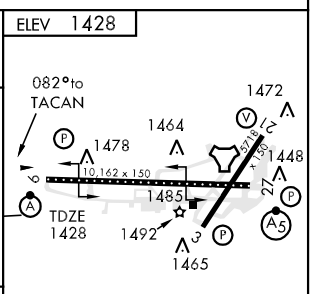
ALSF-2

MISSED APPROACH: Climb to 2500 then climbing right turn to 4000 via LKI R-099 to MILOD 15 DME and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON	ASR
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6	







CATEGORY	A	B	C	D	E
S-9	1880/24 452 (500-½)		1880/40 452 (500-¾)	1880/50 452 (500-1)	
CIRCLING *	1920-1 492 (500-1)		1920-1½ 492 (500-1½)	1980-2 552 (600-2)	

TDZL/CL Rwy 9
REIL Rwy 3 and 21
HIRL Rwy 3-21 and 9-27

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

TACAN RWY 27

TACAN LKI Chan 11	APCH CRS 279°	Rwy ldg 10,162 TDZE 1421 Arpt Elev 1428	AL-125 [USAF]	DULUTH INTL (KDLH)

* Category E not authorized SE Rwy 3 and Rwy 27.

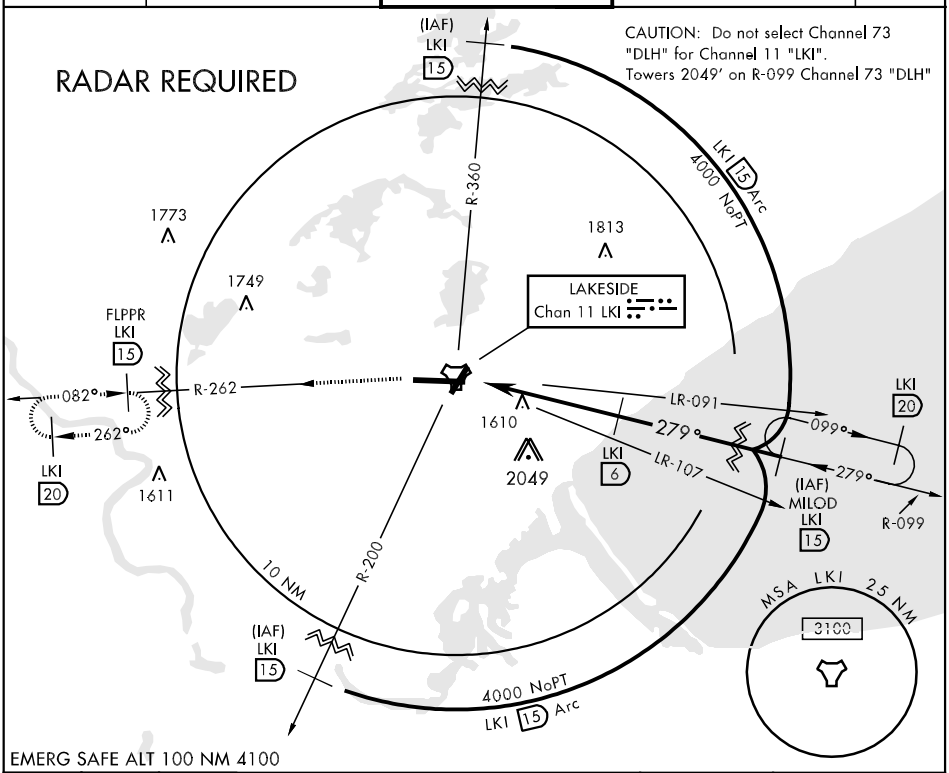
MALSR

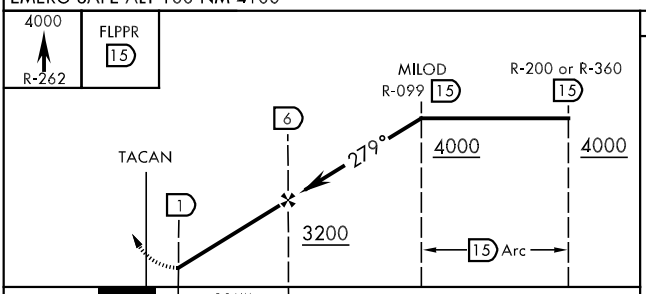
MISSED APPROACH: Climb to 4000 via R-262 to FLPPR 15 DME and hold.

ATIS	DULUTH APP CON	DULUTH TOWER	GND CON	ASR
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6	

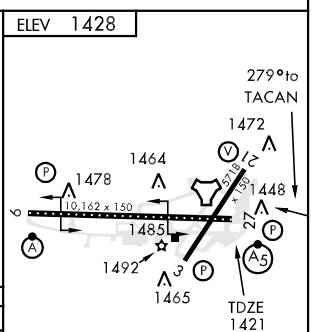
RADAR REQUIRED

CAUTION: Do not select Channel 73 "DLH" for Channel 11 "LKI". Towers 2049' on R-099 Channel 73 "DLH"





ELEV 1428



CATEGORY	A	B	C	D	E
S-27	1860/24 439 (500-½)		1860/40 439 (500-¾)	1860/50 439 (500-1)	
CIRCLING *	1920-1 492 (500-1)		1920-1½ 492 (500-1½)	1980-2 552 (600-2)	

TDZL/CL Rwy 9
REIL Rwy 3 and 21
HIRL Rwy 3-21 and 9-27

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VORTAC DLH	APP CRS	Rwy Idg	5718
112.6	197°	TDZE	1420
Chan 73		Apt Elev	1428

VOR/DME or TACAN RWY 21

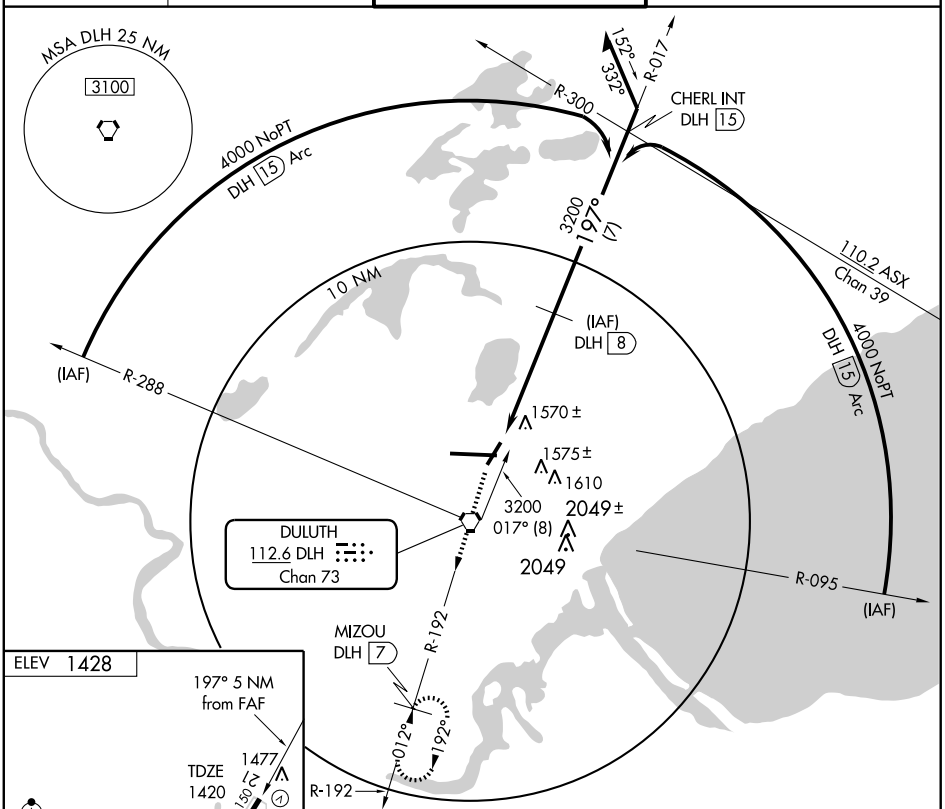
DULUTH INTL (DLH)

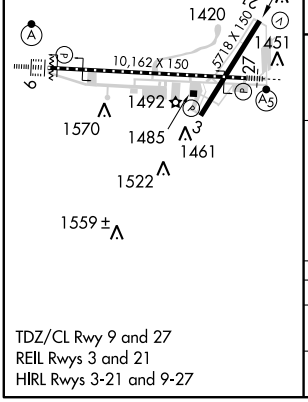
T ASR

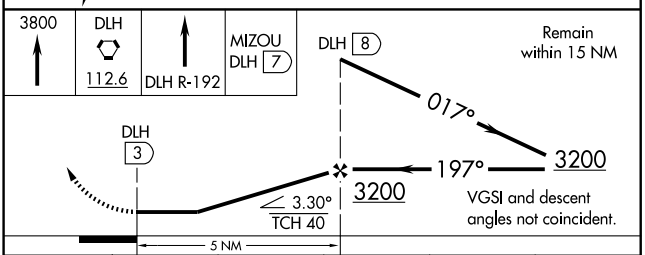
Cat E Circling not authorized southeast of Rwys 3 and 27.

MISSED APPROACH: Climb to 3800 via direct DLH VORTAC, then DLH R-192 to MIZOU 7 DME and hold.

ATIS	DULUTH APP CON ★	DULUTH TOWER	GND CON
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6







CATEGORY	A	B	C	D	E
S-21	1860-1	440 (500-1)	1860-1¼ 440 (500-1¼)	1860-1½	440 (500-1½)
CIRCLING	1920-1	492 (500-1)	1920-1½ 492 (500-1½)	1980-2	552 (600-2)

TDZ/CL Rwy 9 and 27
REIL Rwys 3 and 21
HIRL Rwys 3-21 and 9-27

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR or TACAN RWY 3

DULUTH INTL (DLH)

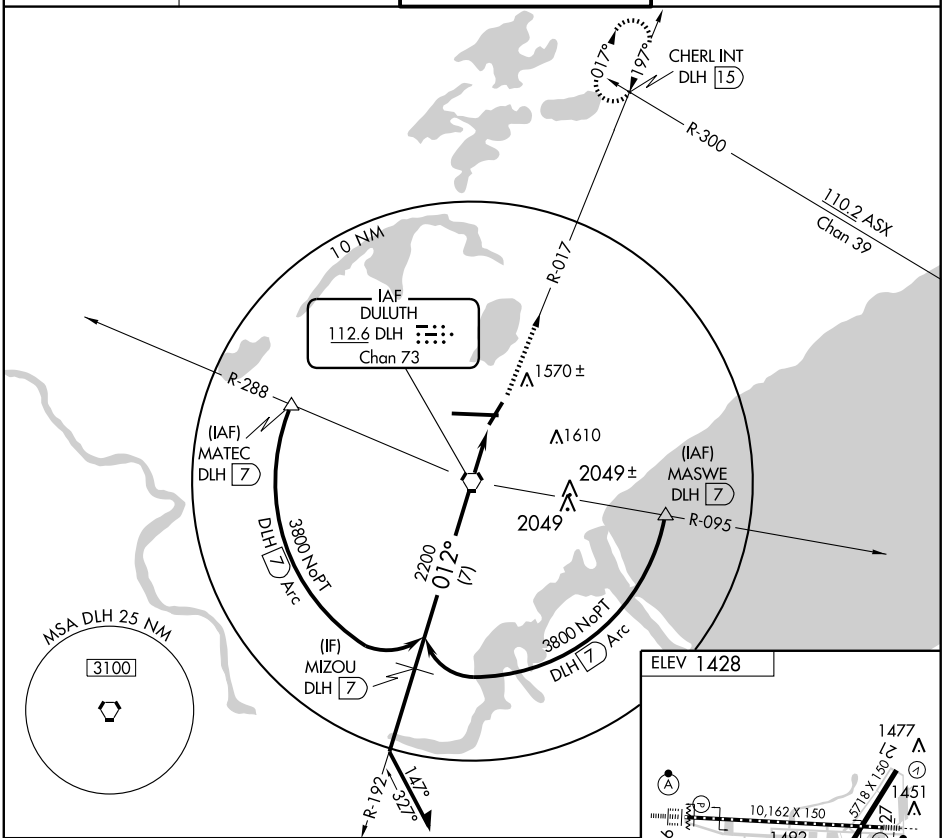
VORTAC DLH	APP CRS	Rwy Idg	5718
112.6	012°	TDZE	1420
Chan 73		Apt Elev	1428

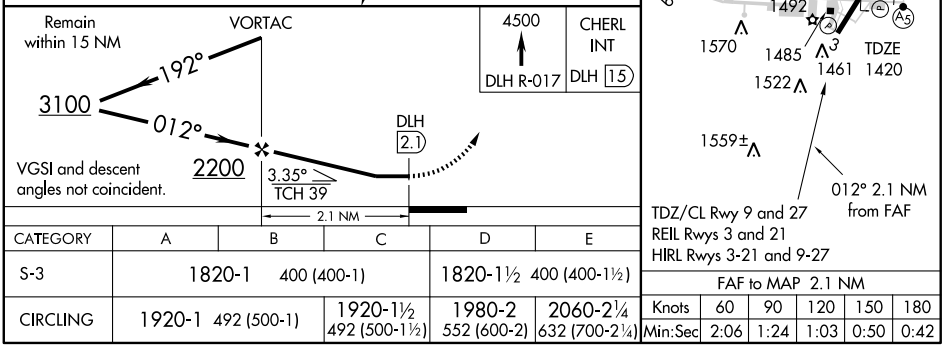
ASR

Circling NA for Cat E southeast of Rwy 3 and 27. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 4500 via DLH R-017 to CHERL INT/DLH 15 DME and hold.

ATIS	DULUTH APP CON ★	DULUTH TOWER	GND CON
124.1 270.1	125.45 255.9	118.3 257.8	121.9 348.6





CATEGORY	A	B	C	D	E
S-3	1820-1 400 (400-1)			1820-1½ 400 (400-1½)	
CIRCLING	1920-1 492 (500-1)		1920-1½ 492 (500-1½)	1980-2 552 (600-2)	2060-2¼ 632 (700-2¼)

FAF to MAP 2.1 NM					
Knots	60	90	120	150	180
Min:Sec	2:06	1:24	1:03	0:50	0:42

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

NORTH COUNTRY SPB (9MØ) 16 N UTC−6(−5DT) N47°00.90′ W92°10.09′ **GREEN BAY**

1370 **FUEL** 100LL NOTAM FILE PNM

WATERWAY 09–27: 5000X300 (WATER)

WATERWAY 03–21: 5000X300 (WATER)

WATERWAY 13–31: 5000X300 (WATER)

SEAPLANE REMARKS: Unattended. 100LL fuel available for emerg purposes only.

COMMUNICATIONS: CTAF 122.7 **UNICOM** 122.8

SKY HARBOR (DYT) 6 SE UTC−6(−5DT) N46°43.31′ W92°02.61′ **GREEN BAY**

610 B S4 **FUEL** 100LL AOE NOTAM FILE DYT **L–14I**

RWY 14–32: H3050X75 (ASPH) MIRL **IAP**

RWY 14: REIL. PAPI(P4L)—GA 4.0° TCH 24′. Trees.

RWY 32: REIL. PAPI(P4L)—GA 4.0° TCH 20′. Thld dsplcd 658′. Trees.

AIRPORT REMARKS: Attended May–Oct SR–SS, Nov–Apr 1400–2200Z‡. Fuel avbl 24 hrs with credit card. Birds on and invof arpt. Trees obscuring AER 32. Rwy 12 tree +90′, 2200′ from AER 12. Be alert: extensive acft activity invof Richard I. Bong Arpt 2 miles SW. North ramp area rough. ACTIVATE MIRL Rwy 14–32, PAPI Rwy 14 and Rwy 32 and REIL Rwy 14 and Rwy 32—CTAF.

WEATHER DATA SOURCES: AWOS–3 119.275 (218) 720–4886.

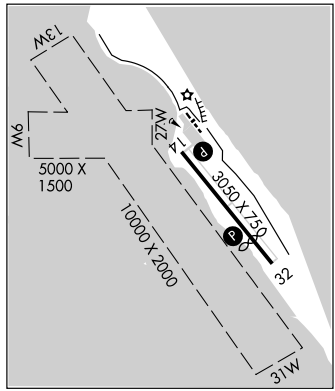
COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ **DULUTH APP/DEP CON** 125.45 (1200–0500Z‡) **CLNC DEL** 124.8

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.9 (0500–1200Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE DLH.

DULUTH (H) VORTACW 112.6 DLH Chan 73 N46°48.13′ W92°12.17′ 121° 8.2 NM to fld. 1428/5E.



WATERWAY 13–31: 10000X2000 (WATER)

WATERWAY 09–27: 5000X1500 (WATER)

SEAPLANE REMARKS: Wind surfing activity invof sealanes May through Sept. For seaplane ops be alert for extensive water sport activities in Lake Superior Bay.

EAST GULL LAKE (9Y2) 8 NW UTC−6(−5DT) N46°23.00′ W94°21.72′ **TWIN CITIES**

1236 NOTAM FILE PNM

RWY 13–31: 2618X160 (TURF)

RWY 13: Tree. **RWY 31:** Trees.

AIRPORT REMARKS: Unattended. CLOSED winters. Watch for vehicles and pedestrians crossing rwy. Low spot 100–200′ north of AER 31 thld. Rwy 13–31 NSTD markings, marked with yellow cones.

COMMUNICATIONS: CTAF 122.9

ELBOW LAKE MUNI—PRIDE OF THE PRAIRIE (Y63) 1 SW UTC−6(−5DT) **TWIN CITIES**

N45°59.16′ W95°59.52′ **L–14H**

1205 B S4 **FUEL** 100LL NOTAM FILE Y63

RWY 14–32: H3400X60 (ASPH) MIRL

RWY 14: REIL. PAPI(P4L)—GA 3.0° TCH 25′. **RWY 32:** REIL. PAPI(P4L)—GA 3.0° TCH 25′. Ground.

AIRPORT REMARKS: Attended. Mon–Fri 1300–0000Z‡. Self service fuel with credit card. Ultralights on and invof arpt. MIRL Rwy 14–32 preset on low ints, to increase ints and ACTIVATE REIL Rwy 14 and Rwy 32 and PAPI Rwy 14 and Rwy 32—CTAF.

WEATHER DATA SOURCES: AWOS–3 118.075 (218) 685–6456.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE FFM.

FERGUS FALLS (T) VORW/DME 110.4 FFM Chan 41 N46°17.36′ W96°09.41′ 154° 19.5 NM to fld.

APP CRS	Rwy Idg	2392
317°	TDZE	610
	Apt Elev	610

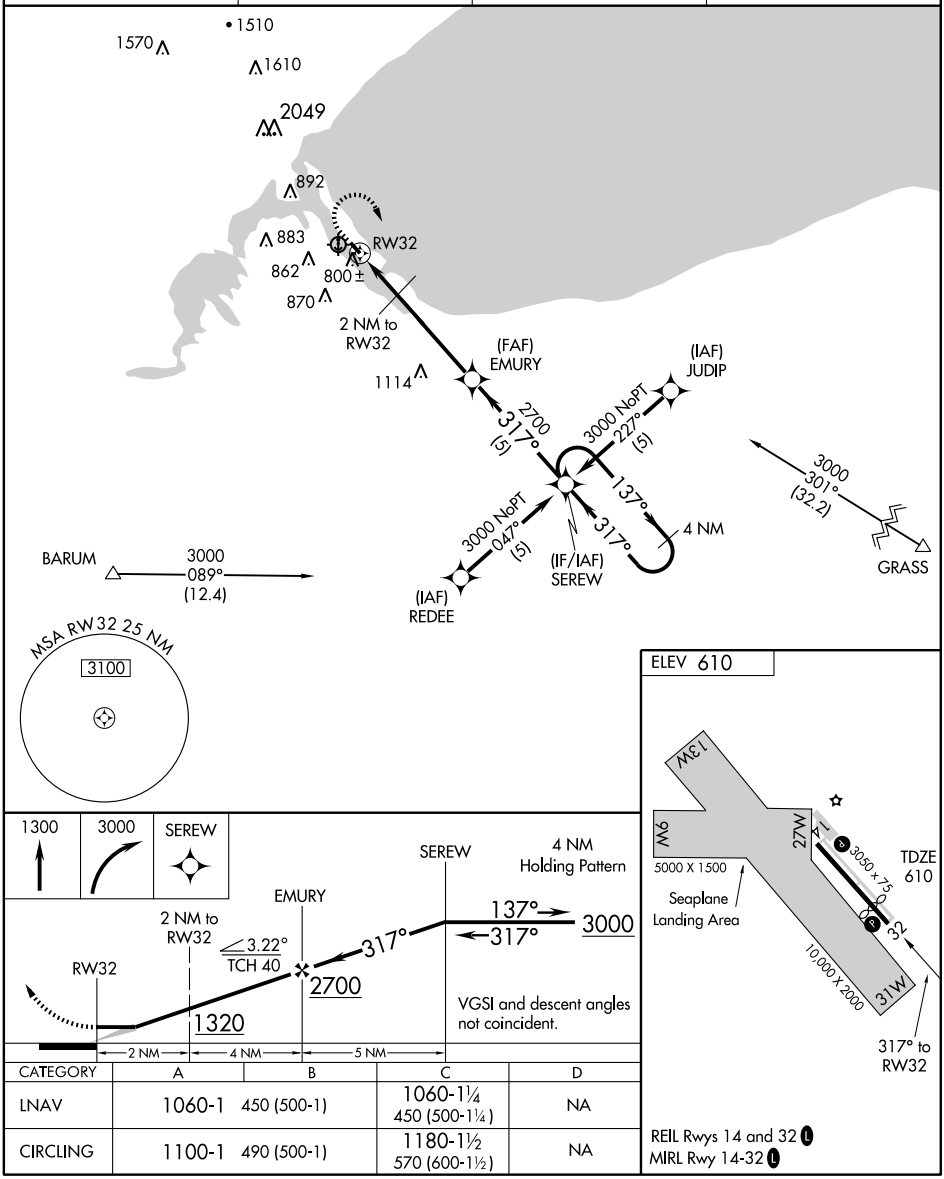
RNAV (GPS) RWY 32

DULUTH/SKY HARBOR (DYT)

GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 1300 then climbing right turn to 3000 direct SEREW WP and hold.

AWOS-3	DULUTH APP CON ★	CLNC DEL	UNICOM
119.275	125.45 255.9	124.8	122.7 (CTAF) L

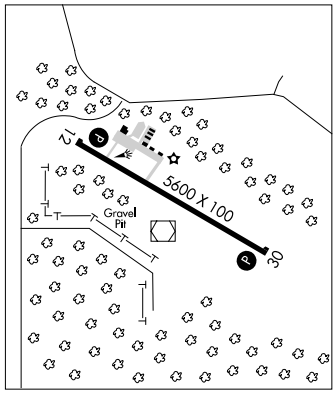


CATEGORY	A	B	C	D
LNAV	1060-1 450 (500-1)		1060-1¼ 450 (500-1¼)	NA
CIRCLING	1100-1 490 (500-1)		1180-1½ 570 (600-1½)	NA

REIL Rwys 14 and 32 L
MIRL Rwy 14-32 L

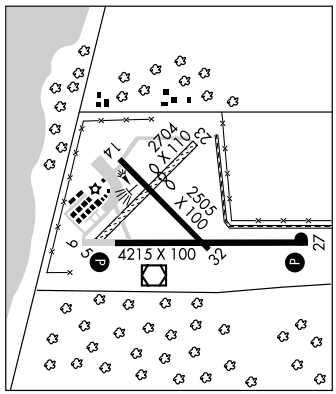
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ELY MUNI (ELO) 4 S UTC−6(−5DT) N47°49.47′ W91°49.84′ **GREEN BAY**
1456 B **FUEL** 100LL, JET A LRA NOTAM FILE ELO **H–2J, L–14I**
RWY 12–30: H5600X100 (ASPH) S–60, D–100 MIRL 0.3% up SE **IAP**
RWY 12: REIL. PAPI(P4L)—GA 3.0° TCH 38′. Trees.
RWY 30: REIL. PAPI(P4L)—GA 3.0° TCH 38′. Trees.
AIRPORT REMARKS: Attended 1400–2300Z‡. For attendant after hrs call 218–365–6335. Rwy 12 and Rwy 30 REIL are omnidirectional. Rwy 12 REIL OTS indef. Rwy 30 REIL OTS indef. Rwy 12 and Rwy 30 PAPI OTS indef. MIRL Rwy 12–30 preset low ints to increase ints and ACTIVATE PAPI and REIL Rwy 12 and Rwy 30—CTAF.
WEATHER DATA SOURCES: AWOS–3 132.025 (218) 365–3814.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.1R 109.6T (PRINCETON RADIO)
AIRRSPACE: CLASS E svc Sep–Mar 1400–2300Z‡, Apr–May 1500–0000Z‡, Jun–Aug 1500–0300Z‡ other times CLASS G.
RADIO AIDS TO NAVIGATION: NOTAM FILE ELO.
(L) VOR/DME 109.6 ELO Chan 33 N47°49.31′ W91°49.81′ at fld. 1489/0E.
VOR unusable 105°–160° byd 20 NM; 161°–179°, 220°–235°.
DME portion unusable 140°–210° byd 30 NM blo 4000′.



EVELETH

EVELETH–VIRGINIA MUNI (EVM) 3 SE UTC−6(−5DT) N47°25.51′ W92°29.89′ **GREEN BAY**
1379 B S2 **FUEL** 100LL, JET A NOTAM FILE EVM **L–14I**
RWY 09–27: H4215X100 (ASPH) S–12 MIRL **IAP**
RWY 09: PAPI(P4R)—GA 3.0° TCH 30′. Trees.
RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 40′. Trees.
RWY 05–23: 2704X110 (TURF)
RWY 05: Trees.
RWY 23: Thld dsplcd 885′. Trees.
RWY 14–32: H2505X100 (ASPH) S–25, D–43 MIRL 0.4% up NW
RWY 14: Trees. **RWY 32:** Road.
AIRPORT REMARKS: Attended Mon–Fri 1400–0100Z‡, Sat 1400–0000Z‡, Sun 1500–2300Z‡. For fuel after hrs call 218–258–3639. Deer and birds on and invof arpt. Rwy 05–23 CLOSED winter months. Rwy 05–23 length and Rwy 23 dsplcd thld marked with yellow cones. ACTIVATE MIRL Rwy 09–27 and Rwy 14–32, REIL Rwy 27 and PAPI Rwy 09 and Rwy 27—CTAF.
WEATHER DATA SOURCES: AWOS–3 108.2 EVM (218) 744–2369.
COMMUNICATIONS: CTAF/UNICOM 122.7
RCO 122.45 (PRINCETON RADIO)
Ⓡ **DULUTH APP/DEP CON** 125.45 (1200–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.9 (0500–1200Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE EVM.
(T) VORW/DME 108.2 EVM Chan 19 N47°25.33′ W92°29.92′ at fld. 1371/1E. **AWOS–3**. Unmonitored.



SKY HARBOR SPB (9Y5) 2 SE UTC−6(−5DT) N47°27.58′ W92°28.59′ **GREEN BAY**
1376 S4 **FUEL** 100LL NOTAM FILE PNM
WATERWAY 07–25: 6500X1000 (WATER)
WATERWAY 03–21: 6500X1000 (WATER)
WATERWAY 14–32: 4500X1000 (WATER)
SEAPLANE REMARKS: Attended May–Oct Mon–Fri 1400–2300Z‡, Nov–Apr Mon–Fri 1400–2230Z‡. For svc after hrs and weekends call 218–744–4104. CAUTION: A rock reef lays from the southwest tip of the island in the center of the lake westward to the shoreline.
COMMUNICATIONS: CTAF 122.7

APP CRS	Rwy Idg	5600
120°	TDZE	1451
	Apt Elev	1455

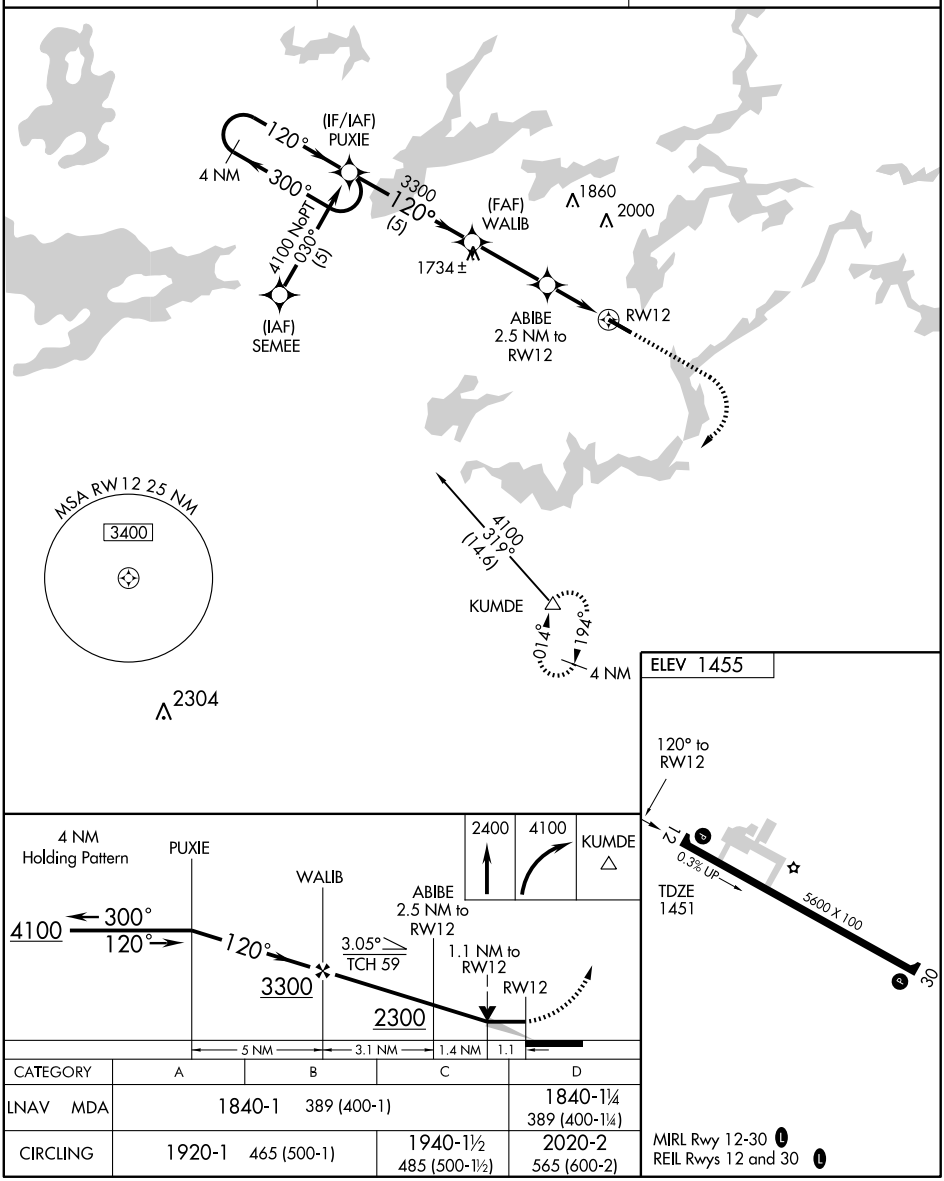
RNAV (GPS) RWY 12

ELY MUNI (ELO)

T
A NA GPS or RNP -0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 2400 then climbing right turn to 4100 direct KUMDE WP and hold.

AWOS-3	PRINCETON RADIO	UNICOM
132.025	122.1R	122.8 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	1840-1 389 (400-1)			1840-1¼ 389 (400-1¼)
CIRCLING	1920-1 465 (500-1)		1940-1½ 485 (500-1½)	2020-2 565 (600-2)

MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 30

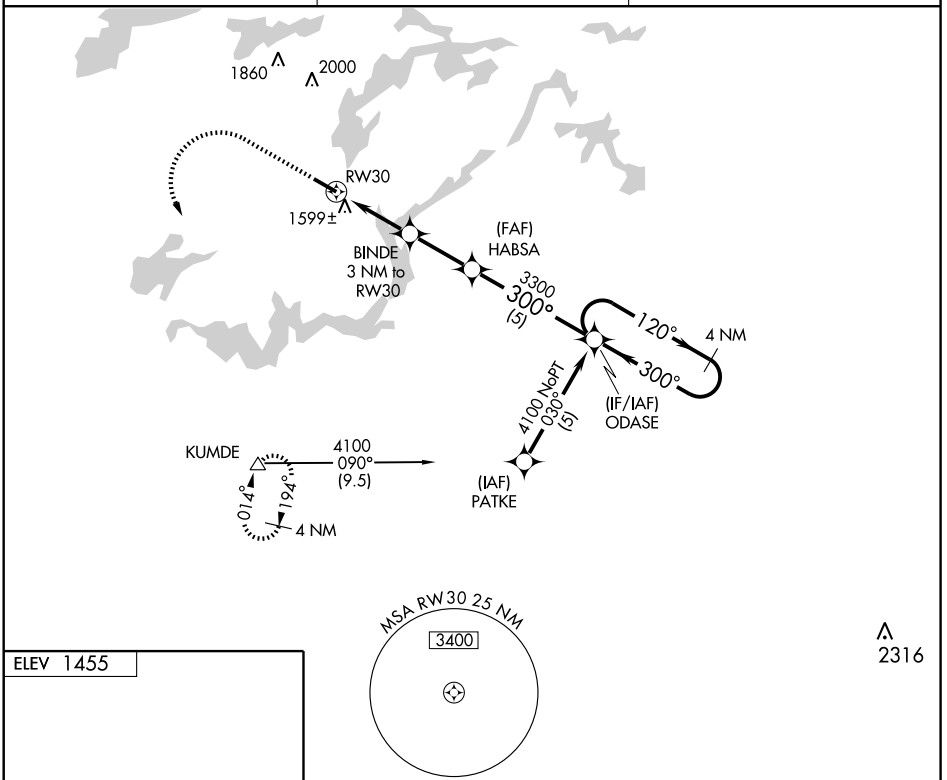
ELY MUNI (ELO)

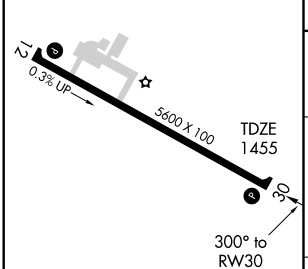
APP CRS	Rwy Idg	5600
300°	TDZE	1455
	Apt Elev	1455

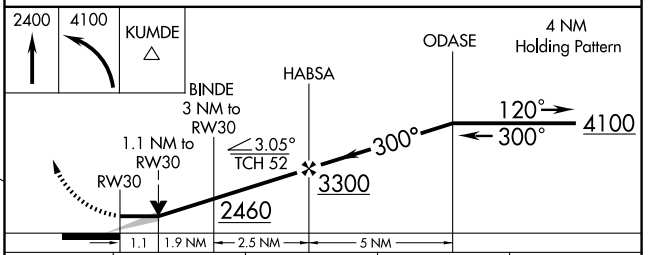
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 2400 then climbing left turn to 4100 direct KUMDE WP and hold.

AWOS-3	PRINCETON RADIO	UNICOM
132.025	122.1R	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1860-1	405 (500-1)	1860-1¼	405 (500-1¼)
CIRCLING	1920-1	465 (500-1)	1940-1½ 485 (500-1½)	2020-2 565 (600-2)

MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

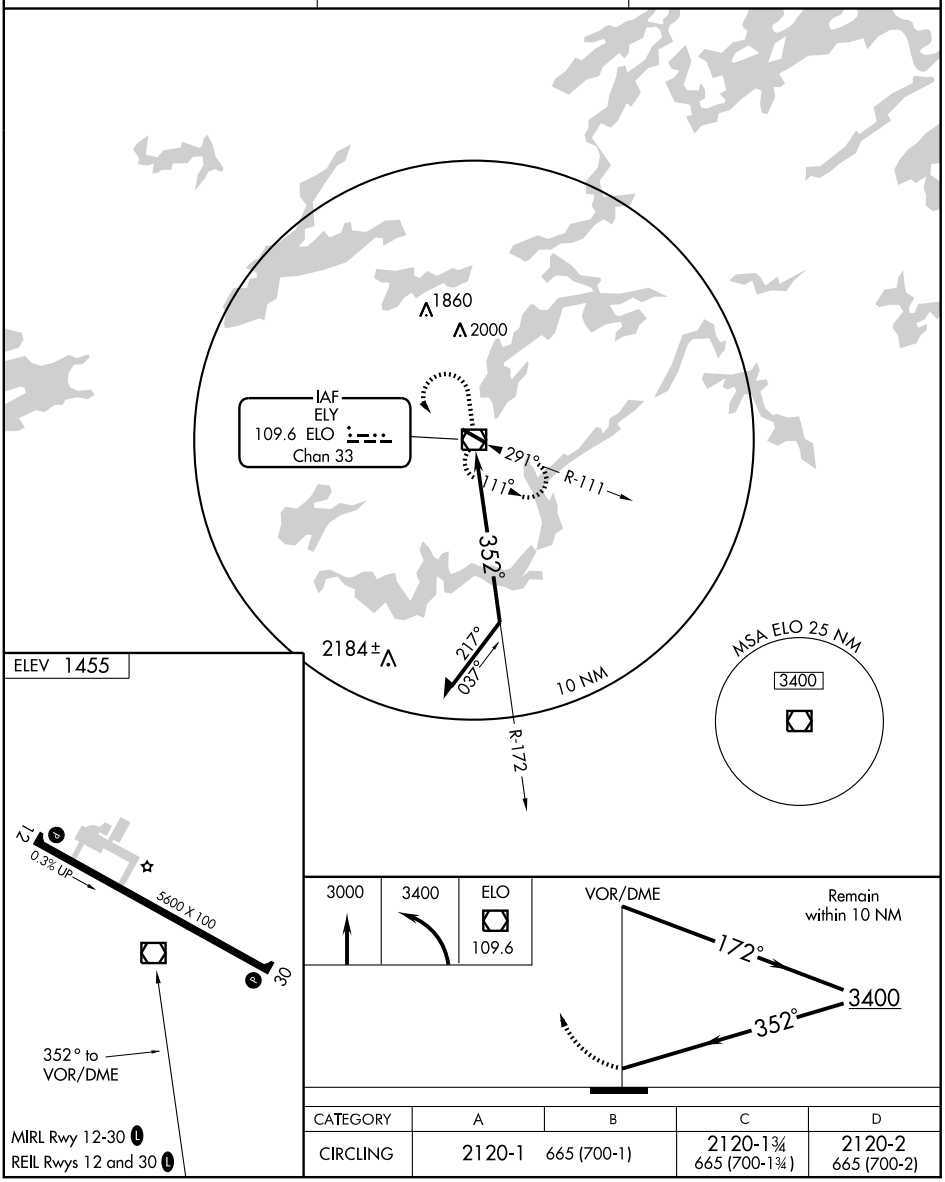
VOR/DME ELO	APP CRS	Rwy Idg	N/A
109.6	352°	TDZE	N/A
Chan 33		Apt Elev	1455

VOR-A
ELY MUNI (ELO)

MISSED APPROACH: Climb to 3000 then climbing left turn to 3400 direct ELO VOR/DME and hold.

AWOS-3	PRINCETON RADIO	UNICOM
132.025	122.1R	122.8 (CTAF) L

NC-1, 21 OCT 2010 to 18 NOV 2010



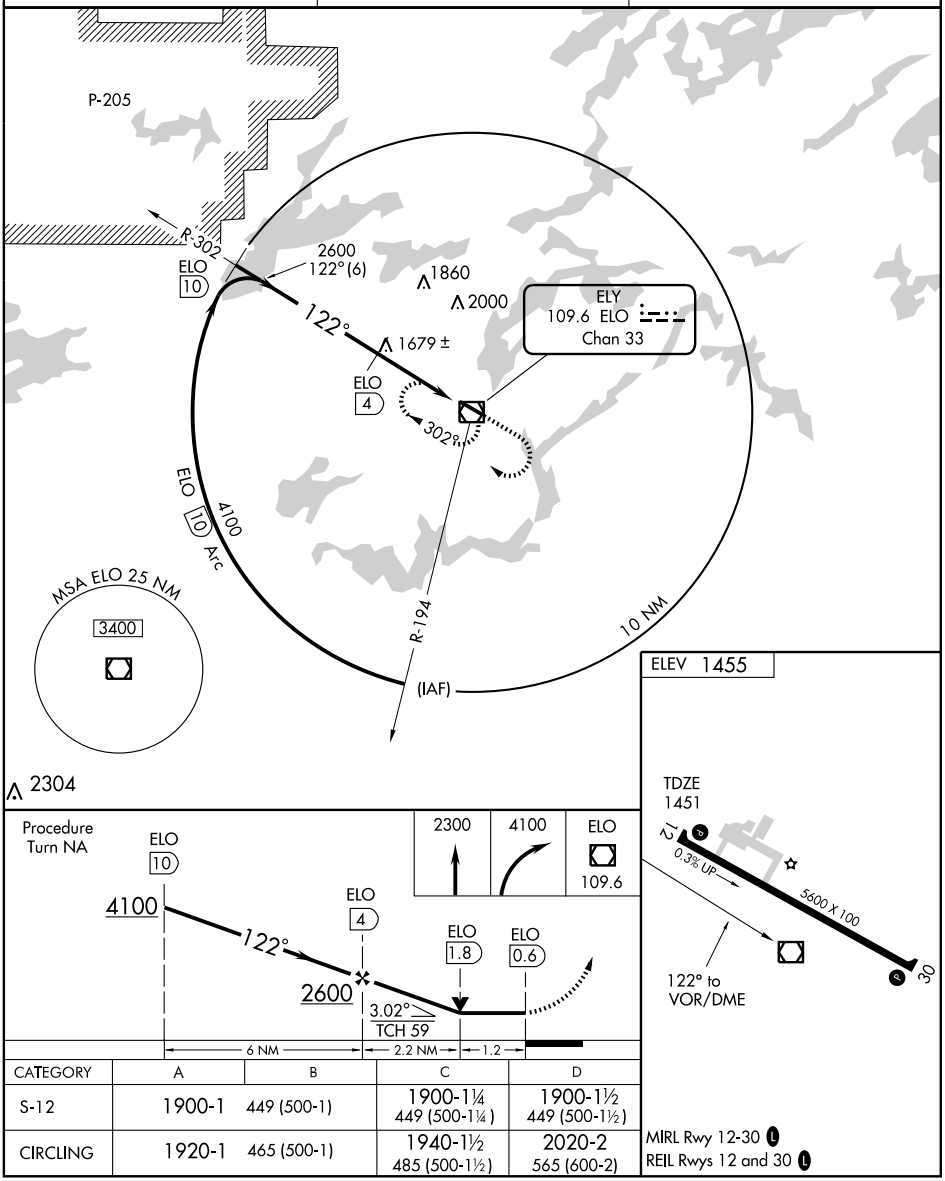
CATEGORY	A	B	C	D
CIRCLING	2120-1	665 (700-1)	2120-1¾ 665 (700-1¾)	2120-2 665 (700-2)

VOR/DME ELO	APP CRS	Rwy Idg	5600
109.6	122°	TDZE	1451
Chan 33		Apt Elev	1455

VOR/DME RWY 12
ELY MUNI (ELO)

MISSED APPROACH: Climb to 2300 then climbing right turn to 4100 direct ELO VOR/DME and hold.

AWOS-3	PRINCETON RADIO	UNICOM
132.025	122.1R	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-12	1900-1	449 (500-1)	1900-1¼ 449 (500-1¼)	1900-1½ 449 (500-1½)
CIRCLING	1920-1	465 (500-1)	1940-1½ 485 (500-1½)	2020-2 565 (600-2)

MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

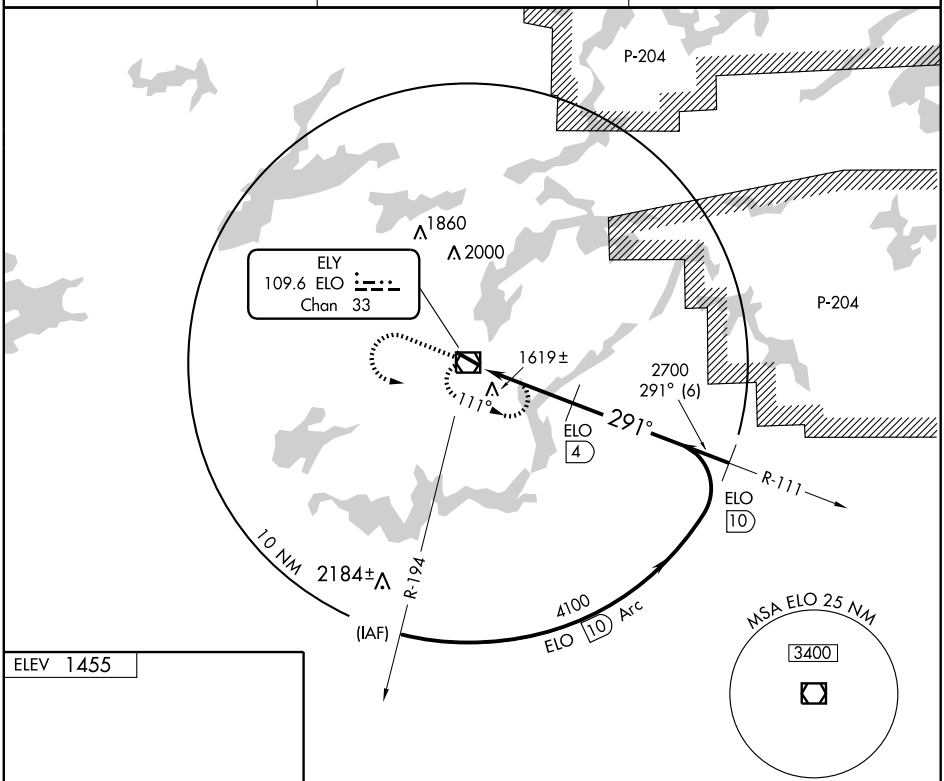
VOR/DME ELO 109.6 Chan 33	APP CRS 291°	Rwy Idg 5600 TDZE 1455 Apt Elev 1455

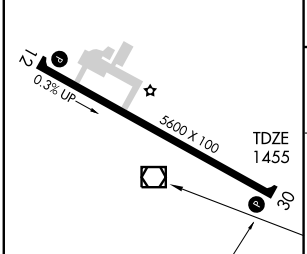
VOR/DME RWY 30

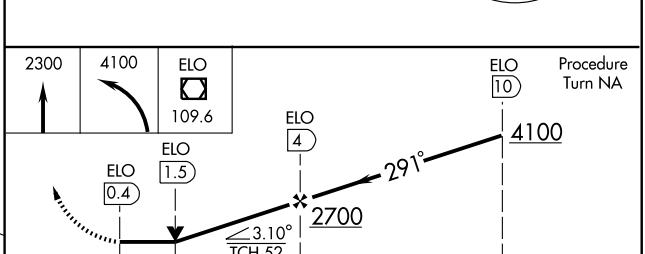
ELY MUNI (ELO)

MISSED APPROACH: Climb to 2300 then climbing left turn to 4100 direct ELO VOR/DME and hold.

AWOS-3	PRINCETON RADIO	UNICOM
132.025	122.1R	122.8 (CTAF) L







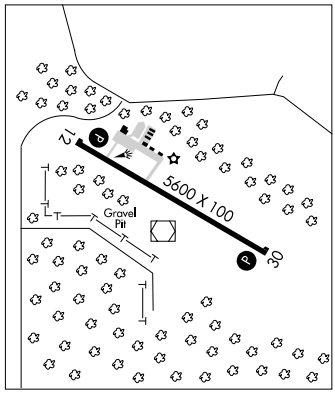
CATEGORY	A	B	C	D
S-30	1880-1	425 (500-1)	1880-1¼	425 (500-1¼)
CIRCLING	1920-1	465 (500-1)	1940-1½ 485 (500-1½)	2020-2 565 (600-2)

MIRL Rwy 12-30 L
REIL Rwys 12 and 30 L

47°49'N-91°50'W

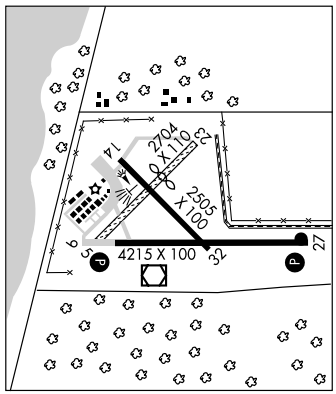
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ELY MUNI (ELO) 4 S UTC−6(−5DT) N47°49.47′ W91°49.84′ **GREEN BAY**
1456 B **FUEL** 100LL, JET A LRA NOTAM FILE ELO **H–2J, L–14I**
RWY 12–30: H5600X100 (ASPH) S–60, D–100 MIRL 0.3% up SE **IAP**
RWY 12: REIL. PAPI(P4L)—GA 3.0° TCH 38′. Trees.
RWY 30: REIL. PAPI(P4L)—GA 3.0° TCH 38′. Trees.
AIRPORT REMARKS: Attended 1400–2300Z‡. For attendant after hrs call 218–365–6335. Rwy 12 and Rwy 30 REIL are omnidirectional. Rwy 12 REIL OTS indef. Rwy 30 REIL OTS indef. Rwy 12 and Rwy 30 PAPI OTS indef. MIRL Rwy 12–30 preset low ints to increase ints and ACTIVATE PAPI and REIL Rwy 12 and Rwy 30—CTAF.
WEATHER DATA SOURCES: AWOS–3 132.025 (218) 365–3814.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.1R 109.6T (PRINCETON RADIO)
AIRRSPACE: CLASS E svc Sep–Mar 1400–2300Z‡, Apr–May 1500–0000Z‡, Jun–Aug 1500–0300Z‡ other times CLASS G.
RADIO AIDS TO NAVIGATION: NOTAM FILE ELO.
(L) VOR/DME 109.6 ELO Chan 33 N47°49.31′ W91°49.81′ at fld. 1489/0E.
VOR unusable 105°–160° byd 20 NM; 161°–179°, 220°–235°.
DME portion unusable 140°–210° byd 30 NM blo 4000′.



EVELETH

EVELETH–VIRGINIA MUNI (EVM) 3 SE UTC−6(−5DT) N47°25.51′ W92°29.89′ **GREEN BAY**
1379 B S2 **FUEL** 100LL, JET A NOTAM FILE EVM **L–14I**
RWY 09–27: H4215X100 (ASPH) S–12 MIRL **IAP**
RWY 09: PAPI(P4R)—GA 3.0° TCH 30′. Trees.
RWY 27: REIL. PAPI(P4L)—GA 3.0° TCH 40′. Trees.
RWY 05–23: 2704X110 (TURF)
RWY 05: Trees.
RWY 23: Thld dsplcd 885′. Trees.
RWY 14–32: H2505X100 (ASPH) S–25, D–43 MIRL 0.4% up NW
RWY 14: Trees. **RWY 32:** Road.
AIRPORT REMARKS: Attended Mon–Fri 1400–0100Z‡, Sat 1400–0000Z‡, Sun 1500–2300Z‡. For fuel after hrs call 218–258–3639. Deer and birds on and invof arpt. Rwy 05–23 CLOSED winter months. Rwy 05–23 length and Rwy 23 dsplcd thld marked with yellow cones. ACTIVATE MIRL Rwy 09–27 and Rwy 14–32, REIL Rwy 27 and PAPI Rwy 09 and Rwy 27—CTAF.
WEATHER DATA SOURCES: AWOS–3 108.2 EVM (218) 744–2369.
COMMUNICATIONS: CTAF/UNICOM 122.7
RCO 122.45 (PRINCETON RADIO)
Ⓡ **DULUTH APP/DEP CON** 125.45 (1200–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.9 (0500–1200Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE EVM.
(T) VORW/DME 108.2 EVM Chan 19 N47°25.33′ W92°29.92′ at fld. 1371/1E. **AWOS–3**. Unmonitored.



SKY HARBOR SPB (9Y5) 2 SE UTC−6(−5DT) N47°27.58′ W92°28.59′ **GREEN BAY**
1376 S4 **FUEL** 100LL NOTAM FILE PNM
WATERWAY 07–25: 6500X1000 (WATER)
WATERWAY 03–21: 6500X1000 (WATER)
WATERWAY 14–32: 4500X1000 (WATER)
SEAPLANE REMARKS: Attended May–Oct Mon–Fri 1400–2300Z‡, Nov–Apr Mon–Fri 1400–2230Z‡. For svc after hrs and weekends call 218–744–4104. CAUTION: A rock reef lays from the southwest tip of the island in the center of the lake westward to the shoreline.
COMMUNICATIONS: CTAF 122.7

APP CRS	Rwy Idg	4215
273°	TDZE	1369
	Apt Elev	1378

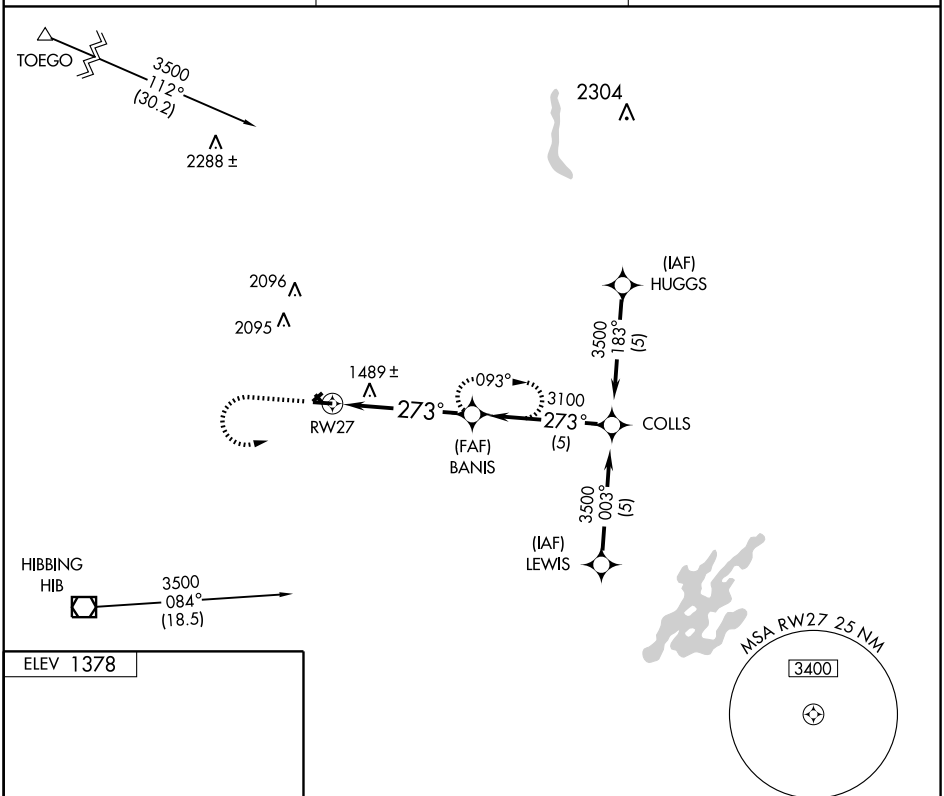
GPS RWY 27

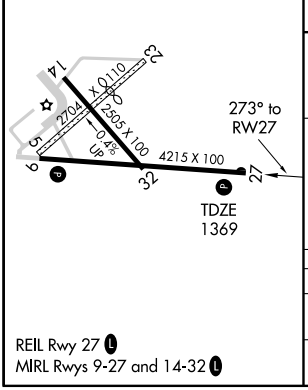
EVELETH-VIRGINIA MUNI (EVM)

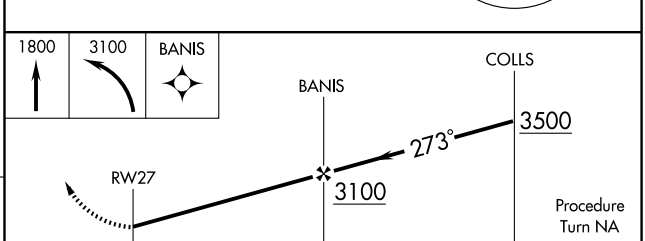
T
NA

MISSED APPROACH: Climb to 1800 then left climbing turn to 3100 direct BANIS WP and hold.

AWOS-3	DULUTH APP CON ★	UNICOM
108.2	125.45 255.9	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-27	1740-1 371 (400-1)			1740-1¼ 371 (400-1¼)
CIRCLING	1920-1 542 (600-1)		1940-1½ 562 (600-1½)	2060-2¼ 682 (700-2¼)

REIL Rwy 27 L
MIRL Rwys 9-27 and 14-32 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

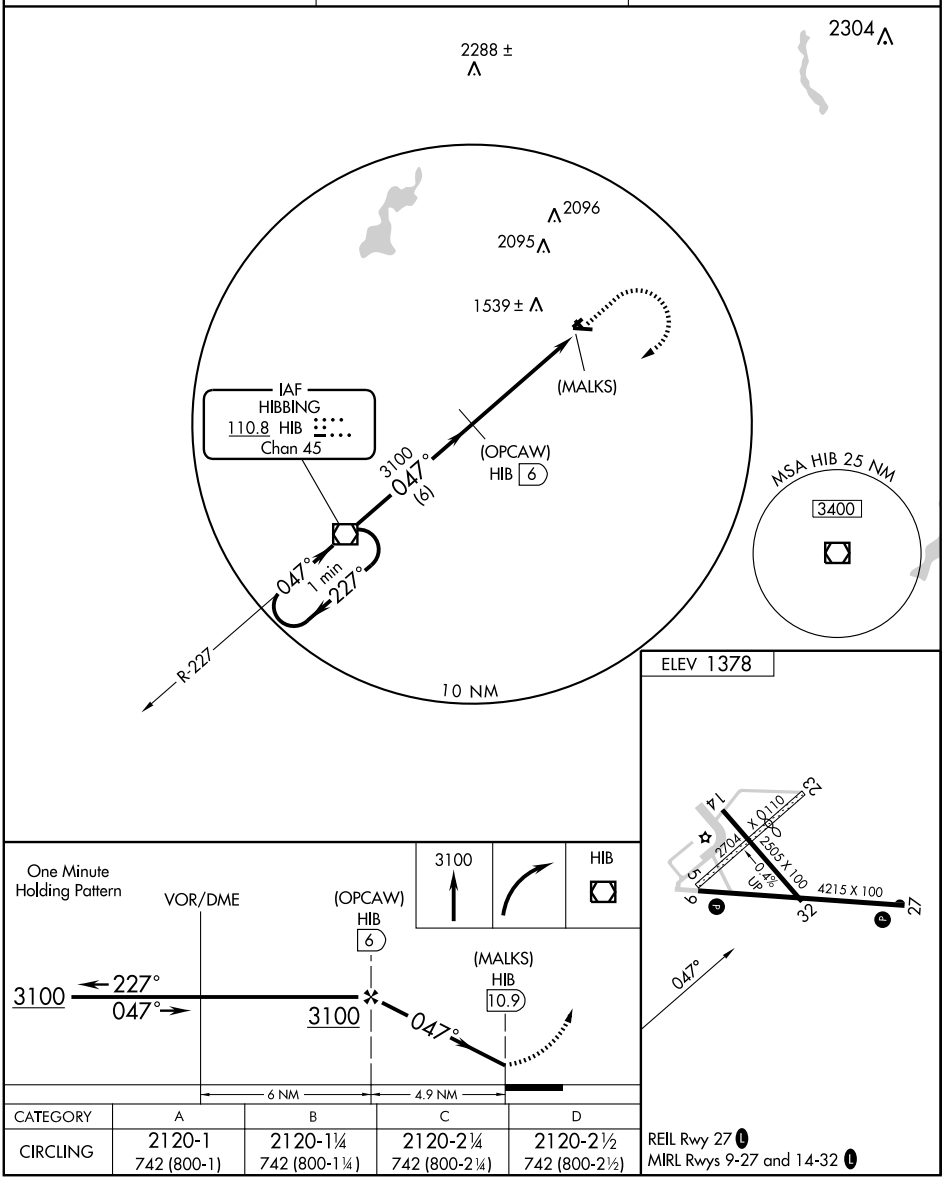
VOR/DME HIB	APP CRS	Rwy Idg	N/A
110.8	047°	TDZE	N/A
Chan 45		Apt Elev	1378

VOR/DME or GPS-A

EVELETH-VIRGINIA MUNI (EVM)

MISSED APPROACH: Climb to 3100 then right turn direct HIB VOR/DME and hold.

AWOS-3	DULUTH APP CON ★	UNICOM
108.2	125.45 255.9	122.7 (CTAF) L



CATEGORY	A	B	C	D
CIRCLING	2120-1 742 (800-1)	2120-1¼ 742 (800-1¼)	2120-2¼ 742 (800-2¼)	2120-2½ 742 (800-2½)

REIL Rwy 27 L

MIRL Rwys 9-27 and 14-32 L

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME EVM	APP CRS	Rwy Idg	4215
108.2	268°	TDZE	1369
Chan 19		Apt Elev	1378

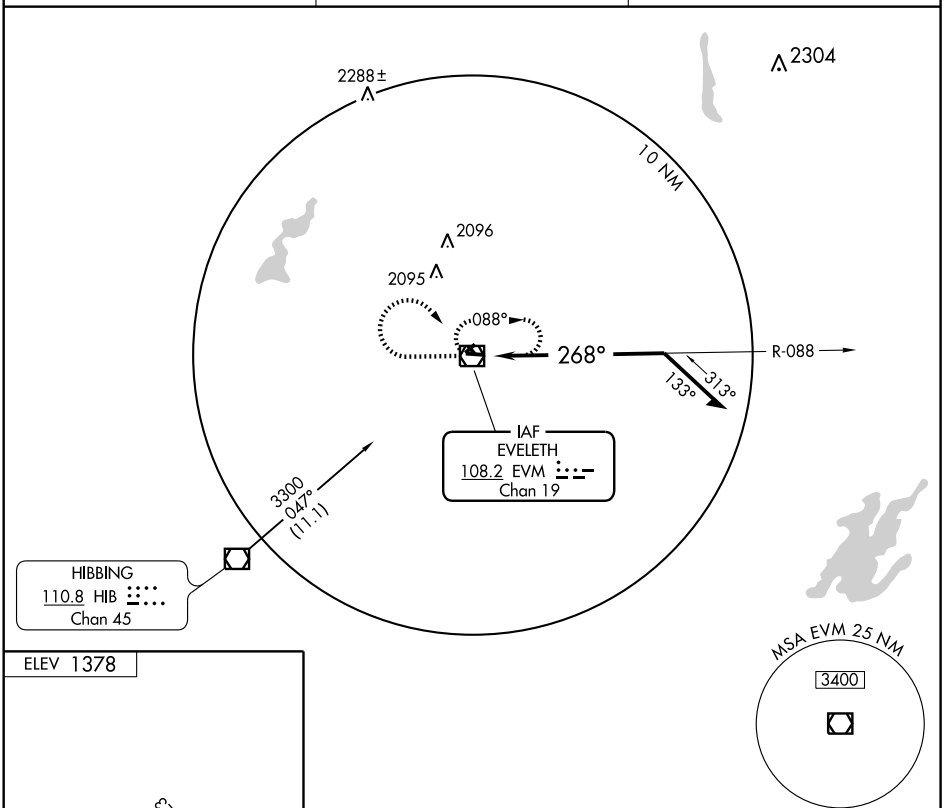
VOR RWY 27

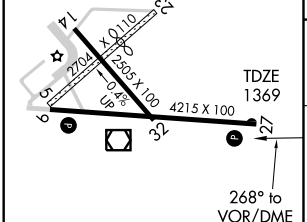
EVELETH-VIRGINIA MUNI (EVM)

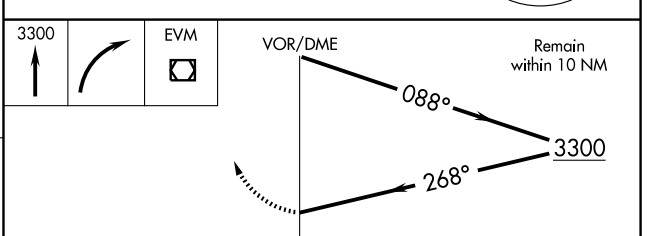
T NA — If local altimeter setting not received, use Range Rgnl altimeter setting and increase all MDAs 40 feet. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3300 then right turn direct EVM VOR/DME and hold.

AWOS-3	DULUTH APP CON ★	UNICOM
108.2	125.45 255.9	122.7 (CTAF) L





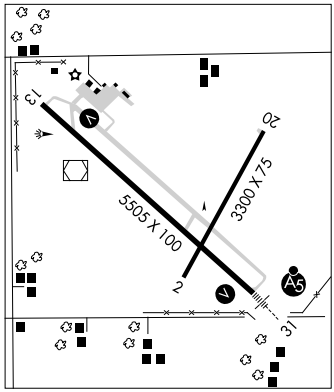


CATEGORY	A	B	C	D
S-27	1820-1 451 (500-1)		1820-1¼ 451 (500-1¼)	1820-1½ 451 (500-1½)
CIRCLING	1900-1 522 (600-1)	1960-1 582 (600-1)	1980-1¾ 602 (700-1¾)	2040-2 662 (700-2)

REIL Rwy 27 L
MIRL Rwys 9-27 and 14-32 L

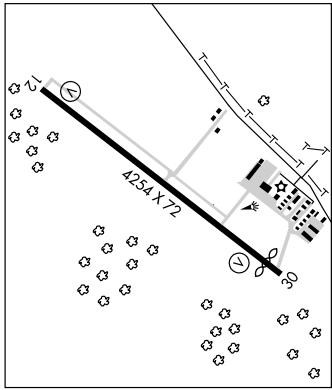
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

FAIRMONT MUNI (FRM) 2 SE UTC−6(−5DT) N43°38.64′ W94°24.94′ OMAHA
1162 B S2 **FUEL** 100LL, JET A NOTAM FILE FRM H–5C, L–12I
RWY 13–31: H5505X100 (ASPH–PFC) S–35, D–40 HIRL IAP
RWY 13: REIL. VASI(V4L)—GA 3.0° TCH 48′. Road.
RWY 31: MALSR. VASI(V4L)—GA 3.0° TCH 46′.
RWY 02–20: H3300X75 (ASPH) S–12 MIRL
AIRPORT REMARKS: Attended Mon–Sat 1400–2300Z‡, Sun 1830–2200Z‡. For svc after hrs call 507–238–9216. Self service fuel with credit card. Migratory bird hazard spring and fall, gulls on and invof arpt. ACTIVATE MIRL Rwy 02–20, HIRL Rwy 13–31, VASI and REIL Rwy 13, VASI and MALSR Rwy 31—122.8.
WEATHER DATA SOURCES: AWOS–3 110.2 FRM (507) 238–1562.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 123.6R 110.2T (PRINCETON RADIO)
MINNEAPOLIS CENTER APP/DEP CON 127.75
AIRSPACE: CLASS E svc Mon–Fri 1130–0130Z‡, Sat 1130–1900Z‡, Sun 1600–2300Z‡ other times CLASS G.
RADIO AIDS TO NAVIGATION: NOTAM FILE FRM.
(L) VOR/DME 110.2 FRM Chan 39 N43°38.76′ W94°25.35′ at fld. 1164/7E. **AWOS–3**
MONTZ NDB (LOM) 420 FQ N43°34.43′ W94°19.08′ 311° 6.0 NM to fld.
ILS 111.1 I-FQJ Rwy 31. LOM MONTZ NDB. Glide Slope unusable for coupled apchs blo 1480′.



FALLS INTL (See INTERNATIONAL FALLS)

FARIBAULT MUNI (FBL) 3 NW UTC−6(−5DT) N44°19.64′ W93°18.65′ OMAHA
1060 B S4 **FUEL** 100LL, JET A OX 4 NOTAM FILE FBL L–12J
RWY 12–30: H4254X72 (ASPH) S–16, D–22 MIRL 0.3% up NW IAP
RWY 12: REIL. VASI(V2L)—GA 3.0° TCH 22′. Trees.
RWY 30: REIL. VASI(V2L)—GA 3.0° TCH 22′. Thld dsplcd 237′. Road.
AIRPORT REMARKS: Attended May–Sep 1400–0100Z‡, Oct–Apr 1400–2300Z‡. For svc after hrs call 507–838–7152. Self svc fuel with credit card. When landing on Rwy 12, be alert for turbulence and possible windshear when winds are out of the south. Ultralights and gliders use twy and extended twy parallel to Rwy 12–30. Ultralights and gliders using twy fly pattern on NE side of Rwy 12–30. ACTIVATE MIRL Rwy 12–30, and REIL Rwy 12 and Rwy 30 —CTAF. VASI Rwy 12 and Rwy 30 on continuously.
WEATHER DATA SOURCES: AWOS–3 111.2 FOW (507) 332–2505.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS APP/DEP CON** 134.7
GCO 121.725 (MINNEAPOLIS CLNC and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
HALFWAY (T) VORW/DME 111.2 FOW Chan 49 N44°12.27′ W93°22.23′ 017° 7.8 NM to fld. 1098/2E. **AWOS–3**. Unmonitored.



FARMINGTON N44°37.86′ W93°10.92′ NOTAM FILE PNM TWIN CITIES
(H) VORTAC 115.7 FGT Chan 104 259° 2 NM to Airlake. 972/6E. H–21, L–12J, 14I, A
VOR unusable:
DME unusable 260°–320° byd 25 NM blo 4000′.
RCO 122.1R 115.7T (PRINCETON RADIO)

LOC I-FQJ	APP CRS	Rwy Idg	5505
111.1	310°	TDZE	1162
		Apt Elev	1162

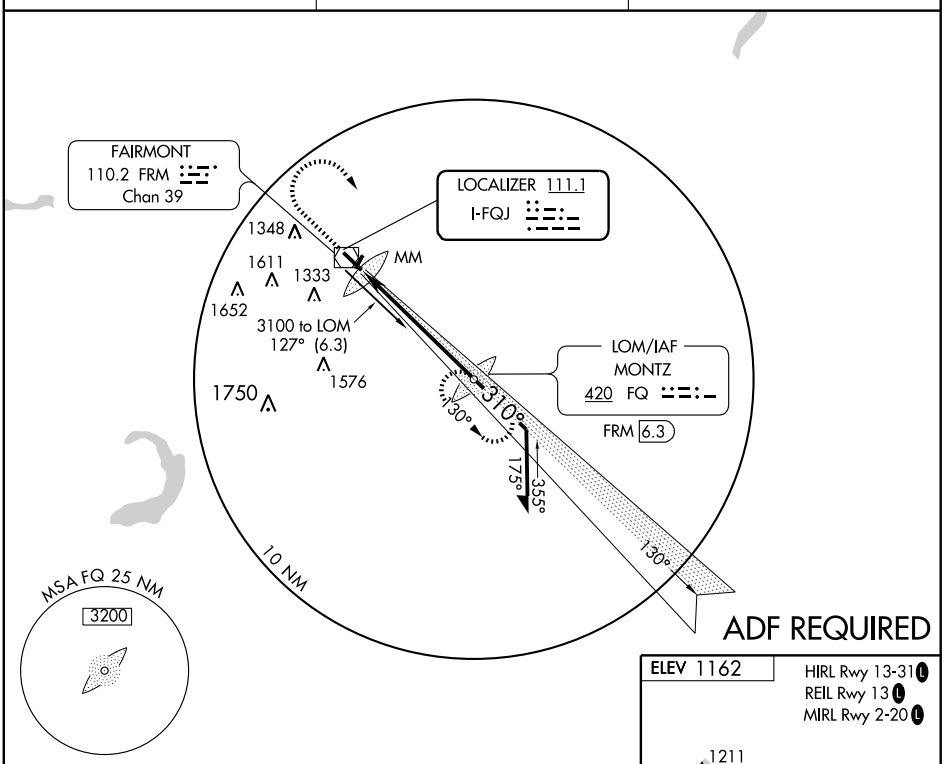
COPTER ILS RWY 31
FAIRMONT MUNI (FRM)

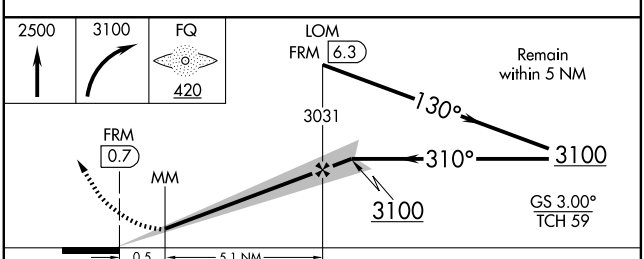
NA
For inoperative MALSR increase visibility to ½ mile.

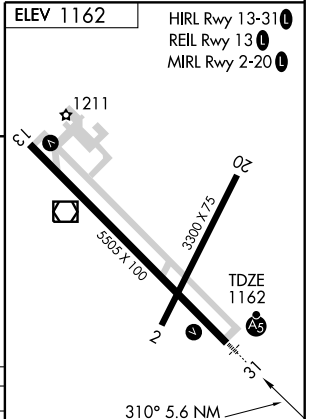
MALSR

MISSED APPROACH: Climb to 2500 then climbing right turn to 3100 direct MONTZ LOM and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.2	127.75 257.7	122.8 (CTAF) L







CATEGORY	COPTER	B	C	D
S-ILS 31	1362-¼ 200 (200-¼)	NA		
S-LOC 31	1540-¼ 378 (400-¼)	NA		
CIRCLING	NA			

FAF to MAP 5.6 NM

Knots	45	60	75	90	105
Min:Sec	7:28	5:36	4:29	3:44	3:12

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ILS or LOC RWY 31

FAIRMONT MUNI (FRM)

LOC I-FQJ	APP CRS	Rwy Idg	5505
111.1	310°	TDZE	1162
		Apt Elev	1162

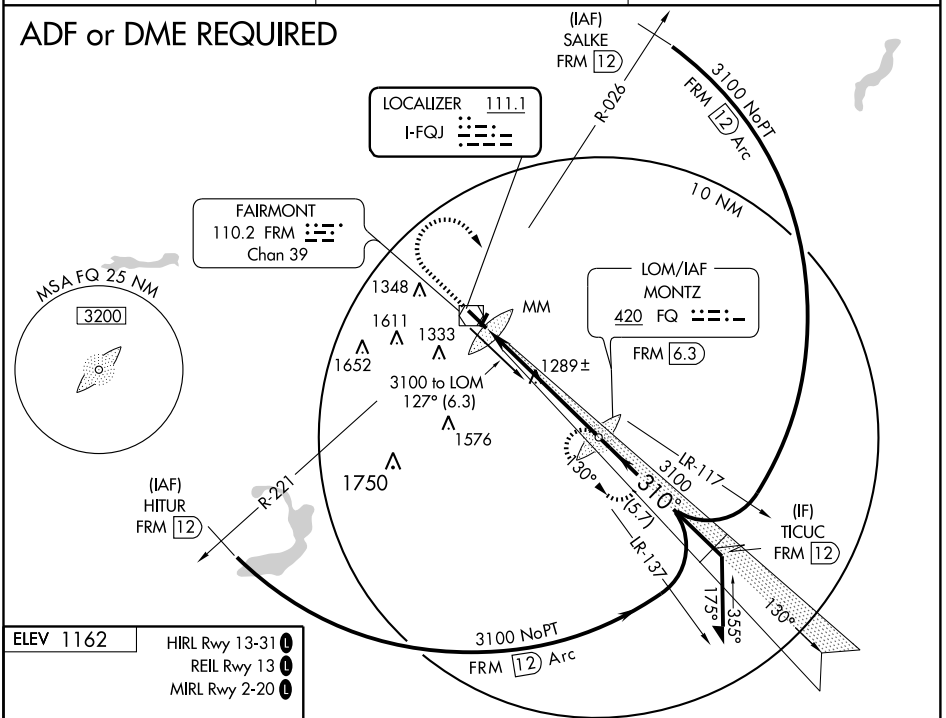
ADF required.
NA Autopilot coupled approach NA below 1480 feet MSL.
S-ILS-31: Inoperative table does not apply.
S-LOC-31: For inoperative MALSR increase Cats A, B, and C visibility to 1, Cat D visibility to 1¼.

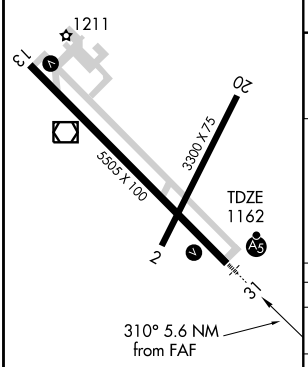
MALSR

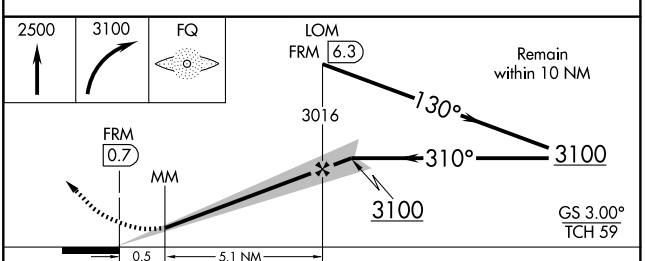
MISSED APPROACH: Climb to 2500 then climbing right turn to 3100 direct MONTZ LOM/ FRM 6.3 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.2	127.75 257.7	122.8 (CTAF) L

ADF or DME REQUIRED







CATEGORY	A	B	C	D
S-ILS 31	1412-¾ 250 (300-¾)			
S-LOC 31	1540-¾ 378 (400-¾)			
CIRCLING	1640-1 478 (500-1)		1640-1½ 478 (500-1½)	1720-2 558 (600-2)

FAF to MAP 5.6 NM

Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	5505
CH 45812	130°	TDZE	1162
W13A		Apt Elev	1162

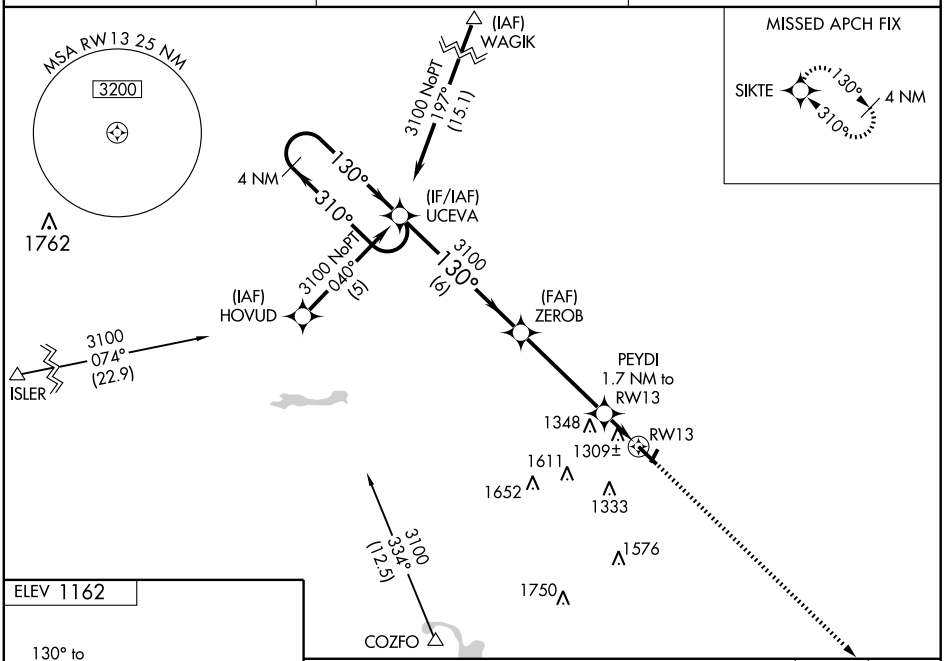
RNAV (GPS) RWY 13

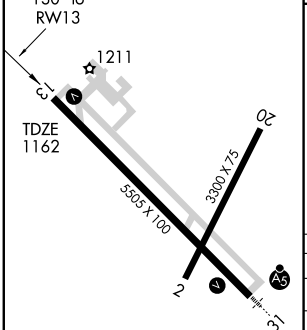
FAIRMONT MUNI (FRM)

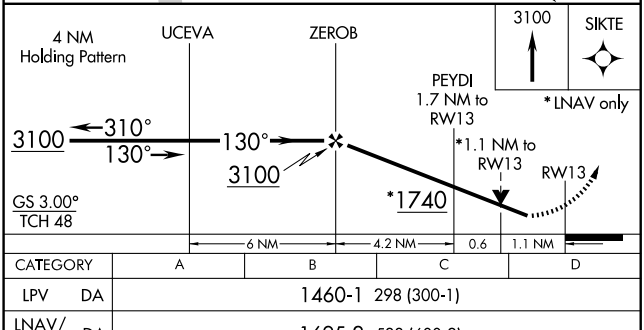
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F).
DME/DME RNP- 0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use St. James altimeter setting and increase all DA 63 feet and all MDA 80 feet, increase LPV all Cats visibility and LNAV Cat C/D visibility ¼ mile.
Baro-VNAV and VDP NA when using St. James altimeter setting.

MISSED APPROACH: Climb to 3100 direct SIKTE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.2	127.75 257.7	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1460-1 298 (300-1)			
LNAV/VNAV DA	1695-2 533 (600-2)			
LNAV MDA	1560-1 398 (400-1)			1560-1¼ 398 (400-1¼)
CIRCLING	1640-1 478 (500-1)		1640-1½ 478 (500-1½)	1720-2 558 (600-2)

HIRL Rwy 13-31 L
REIL Rwy 13 L
MIRL Rwy 2-20 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	5505
CH 90412	310°	TDZE	1162
W31A		Apt Elev	1162

RNAV (GPS) RWY 31

FAIRMONT MUNI (FRM)

T For inoperative MALSR, increase LPV all Cats visibility to 1 mile and LNAV Cat D visibility to 1¼ mile.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.
When local altimeter setting not received, use St. James altimeter setting and increase all DA 63 feet and all MDA 80 feet, increase LPV and LNAV/VNAV all Cats visibility and LNAV Cat C visibility ¼ mile.
Baro-VNAV NA when using St. James altimeter setting.
For inoperative MALSR when using St. James altimeter setting, increase LPV all Cats visibility ½ mile.

A

MALSR

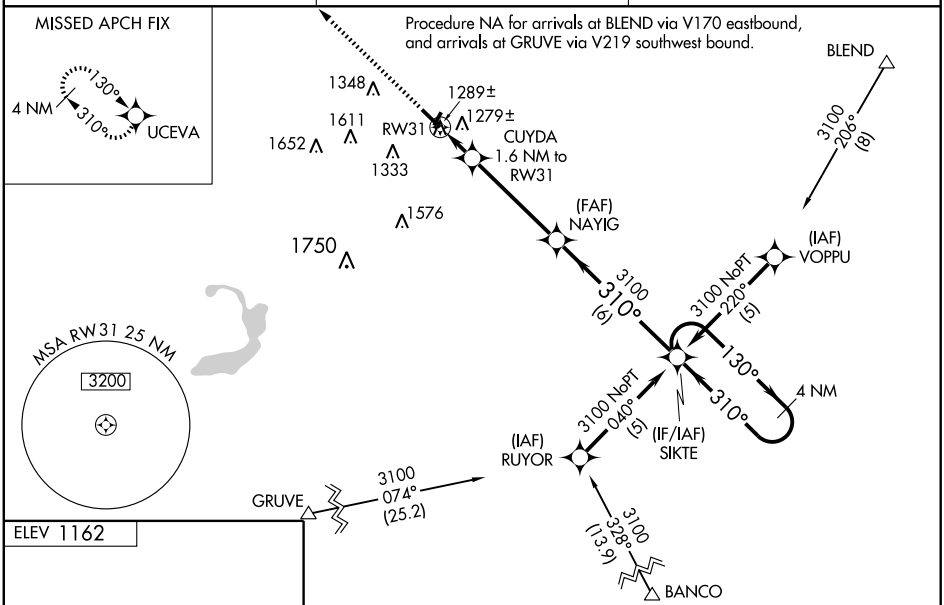
MISSED APPROACH: Climb to 3100 direct UCEVA and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.2	127.75 257.7	122.8 (CTAF) L

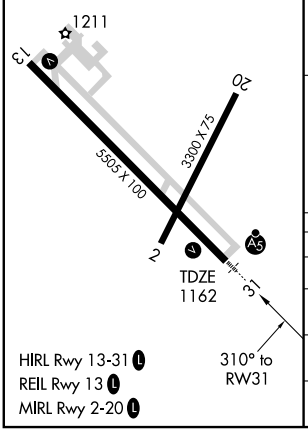
MISSED APCH FIX

4 NM 130° 310° UCEVA

Procedure NA for arrivals at BLEND via V170 eastbound, and arrivals at GRUVE via V219 southwest bound.



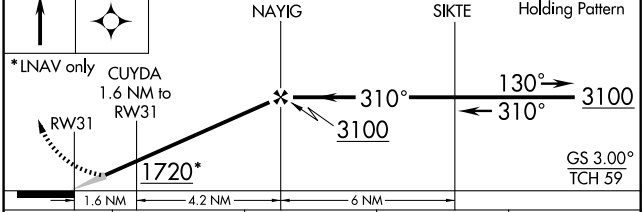
ELEV 1162



3100 UCEVA

VGSI and RNAV glidepath not coincident.

4 NM Holding Pattern



CATEGORY	A	B	C	D
LPV DA	1467-½ 305 (400-½)			
LNAV/VNAV DA	1581-1 419 (500-1)			
LNAV MDA	1560-½ 398 (400-½)			1560-1 398 (400-1)
CIRCLING	1640-1 478 (500-1)		1640-1½ 478 (500-1½)	1720-2 558 (600-2)

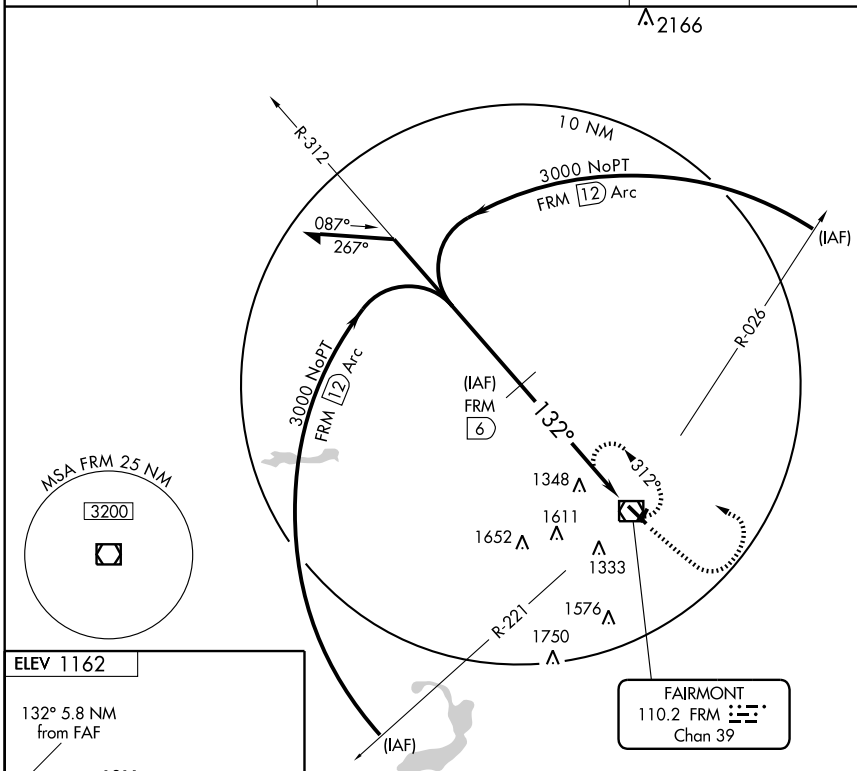
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

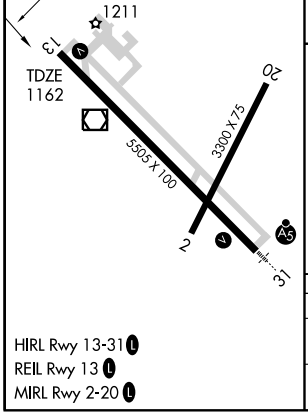
VOR/DME FRM	APP CRS	Rwy Idg	5505
110.2	132°	TDZE	1162
Chan 39		Apt Elev	1162

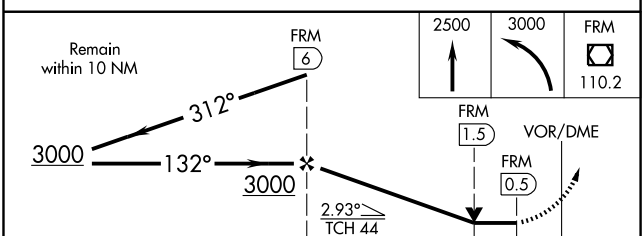
VOR/DME RWY 13
FAIRMONT MUNI (FRM)

MISSED APPROACH: Climb to 2500 then climbing left turn to 3000 direct FRM VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.2	127.75 257.7	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-13	1620-1 458 (500-1)		1620-1¼ 458 (500-1¼)	1620-1½ 458 (500-1½)
CIRCLING	1660-1 498 (500-1)		1660-1½ 498 (500-1½)	1720-2 558 (600-2)

HIRL Rwy 13-31 L
REIL Rwy 13 L
MIRL Rwy 2-20 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME FRM	APP CRS	Rwy Idg	5505
110.2	305°	TDZE	1162
Chan 39		Apt Elev	1162

VOR/DME RWY 31

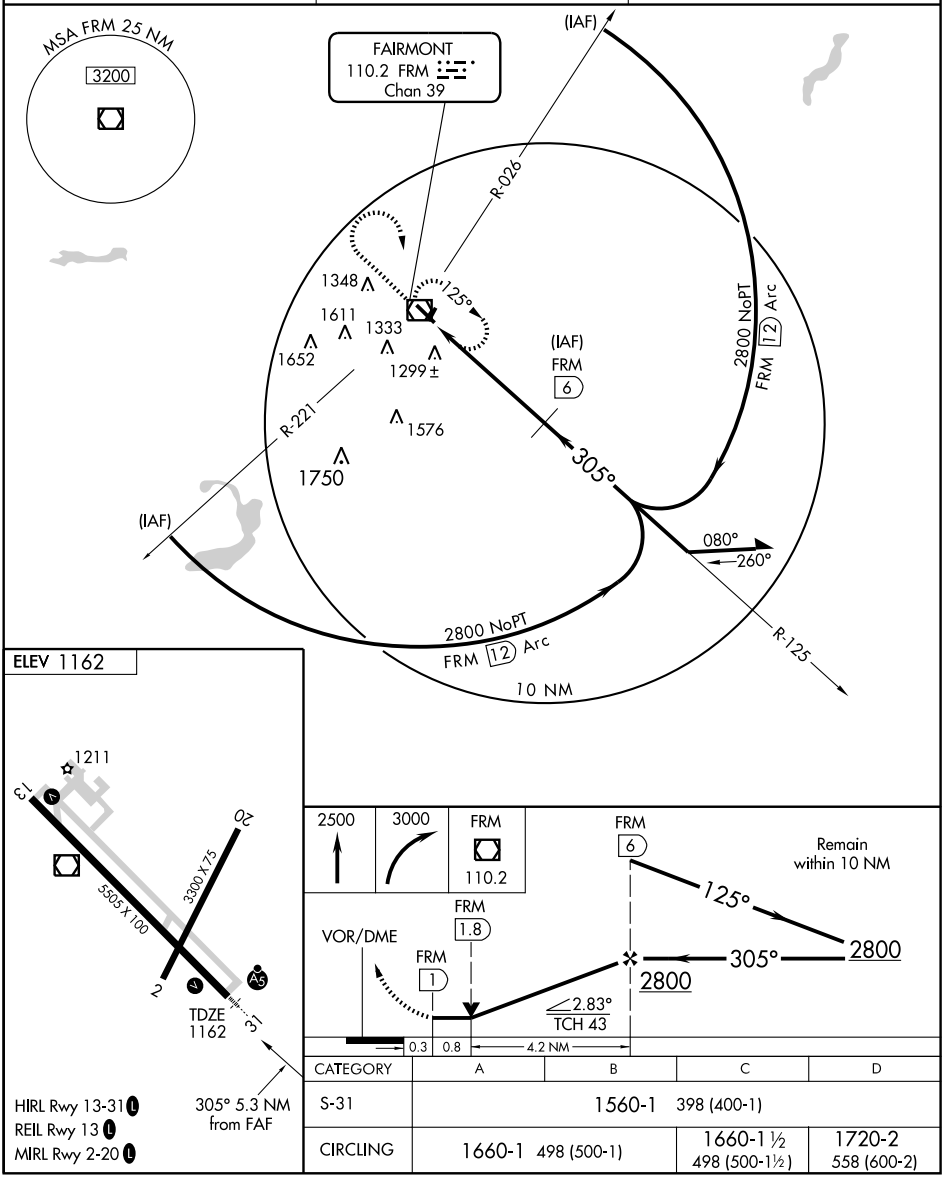
FAIRMONT MUNI (FRM)

Category D S-31 visibilities increased ¼ mile for inoperative MALSR. Inoperative components table does not apply to Categories A, B and C.

MALSR

MISSED APPROACH: Climb to 2500 then climbing right turn to 3000 direct FRM VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.2	127.75 257.7	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-31	1560-1 398 (400-1)			
CIRCLING	1660-1 498 (500-1)		1660-1 ½ 498 (500-1½)	1720-2 558 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

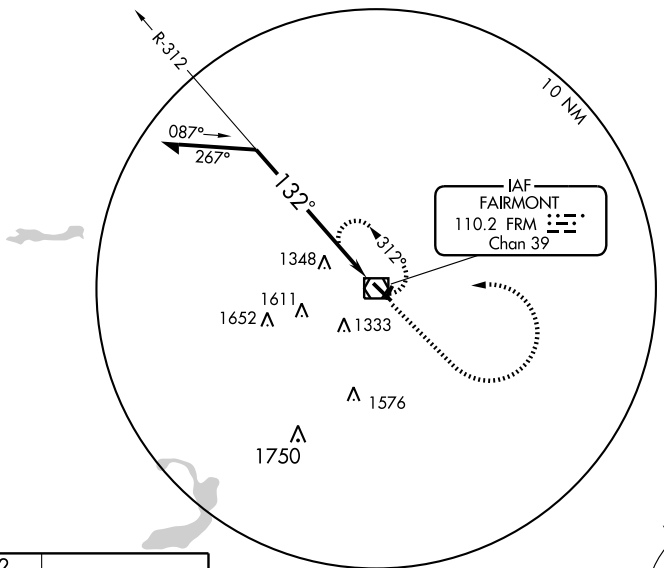
VOR/DME FRM	APP CRS	Rwy Idg	5505
110.2	132°	TDZE	1162
Chan 39		Apt Elev	1162

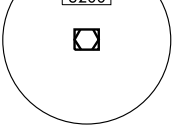
VOR RWY 13
FAIRMONT MUNI (FRM)

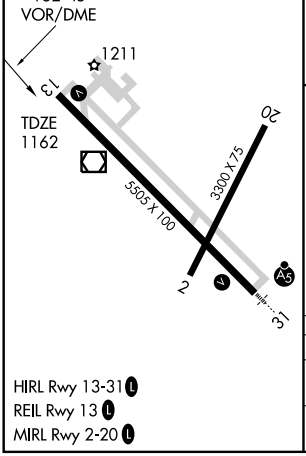
Visibility reduction by helicopters NA.
When local altimeter setting not received, use St. James altimeter setting and increase all MDA 80 feet, increase S-13 Cat C/D visibility and circling Cat C visibility ¼ mile.
VDP NA when using St. James altimeter setting.

MISSED APPROACH: Climb to 2500 then climbing left turn to 3000 direct FRM VOR/DME and hold.

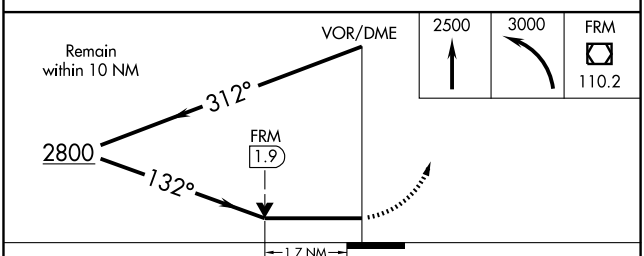
AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.2	127.75 257.7	122.8 (CTAF) L







HIRL Rwy 13-31 L
REIL Rwy 13 L
MIRL Rwy 2-20 L



CATEGORY	A	B	C	D
S-13	1740-1 578 (600-1)		1740-1½ 578 (600-1½)	1740-1¾ 578 (600-1¾)
CIRCLING	1740-1 578 (600-1)		1740-1½ 578 (600-1½)	1740-2 578 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME FRM	APP CRS	Rwy Idg	5505
110.2	305°	TDZE	1162
Chan 39		Apt Elev	1162

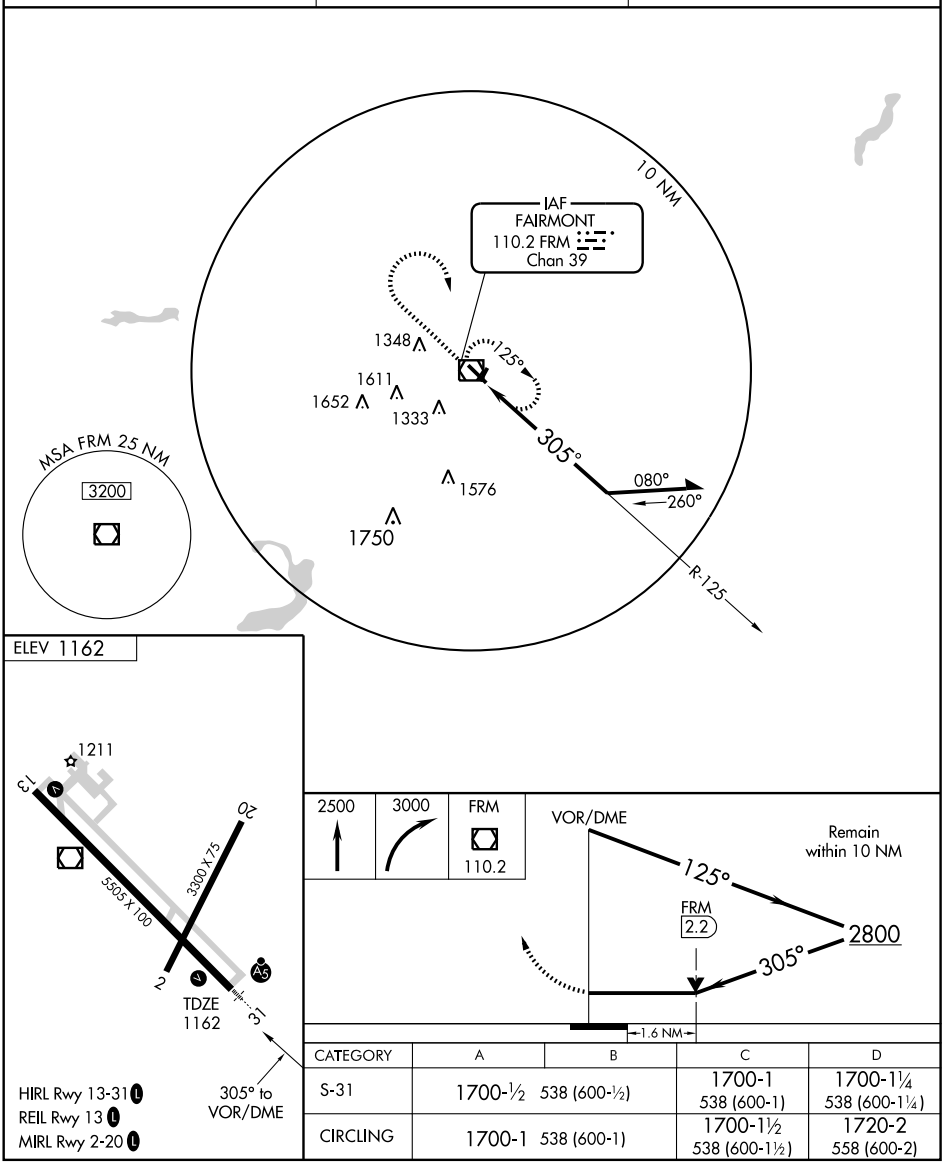
VOR RWY 31
FAIRMONT MUNI (FRM)

T A When local altimeter setting not received, use St. James altimeter setting and increase all MDA 80 feet, increase S-31 Cat C/D visibility and circling Cat C visibility ¼ mile. VDP NA when using St. James altimeter setting.

MALSR

MISSED APPROACH: Climb to 2500 then climbing right turn to 3000 direct FRM VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.2	127.75 257.7	122.8 (CTAF) L



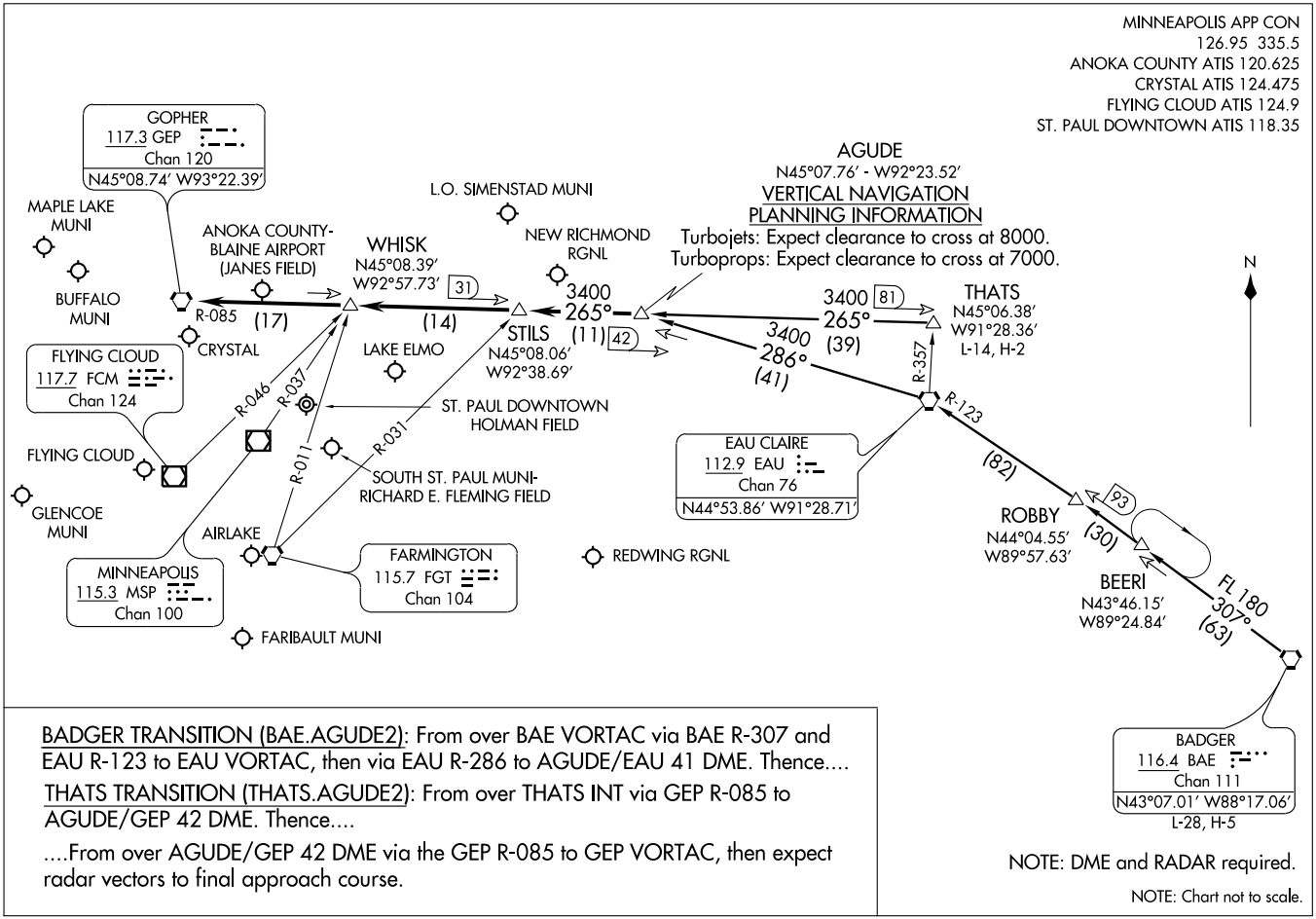
CATEGORY	A	B	C	D
S-31	1700-½ 538 (600-½)		1700-1 538 (600-1)	1700-1¼ 538 (600-1¼)
CIRCLING	1700-1 538 (600-1)		1700-1½ 538 (600-1½)	1720-2 558 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

AGUDE TWO ARRIVAL

(AGUDE.AGUDE2) 10154

MINNEAPOLIS-ST. PAUL, MINNESOTA



BADGER TRANSITION (BAE.AGUDE2): From over BAE VORTAC via BAE R-307 and EAU R-123 to EAU VORTAC, then via EAU R-286 to AGUDE/EAU 41 DME. Thence....

THATS TRANSITION (THATS.AGUDE2): From over THATS INT via GEP R-085 to AGUDE/GEP 42 DME. Thence....

....From over AGUDE/GEP 42 DME via the GEP R-085 to GEP VORTAC, then expect radar vectors to final approach course.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

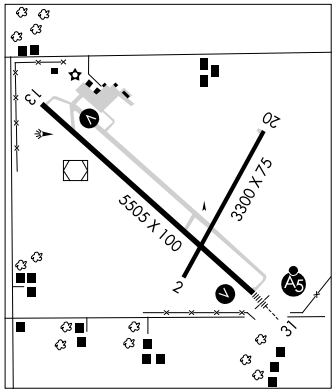
(AGUDE.AGUDE2) 10154

AGUDE TWO ARRIVAL

ST-263 (FAA)

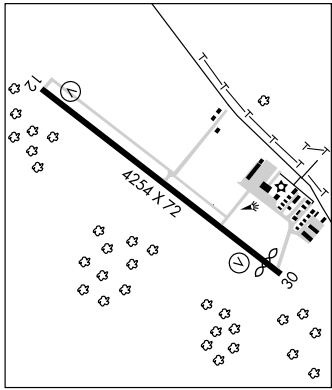
MINNEAPOLIS-ST. PAUL, MINNESOTA

FAIRMONT MUNI (FRM) 2 SE UTC−6(−5DT) N43°38.64′ W94°24.94′ OMAHA
1162 B S2 **FUEL** 100LL, JET A NOTAM FILE FRM H–5C, L–12I
RWY 13–31: H5505X100 (ASPH–PFC) S–35, D–40 HIRL IAP
RWY 13: REIL. VASI(V4L)—GA 3.0° TCH 48′. Road.
RWY 31: MALSR. VASI(V4L)—GA 3.0° TCH 46′.
RWY 02–20: H3300X75 (ASPH) S–12 MIRL
AIRPORT REMARKS: Attended Mon–Sat 1400–2300Z‡, Sun 1830–2200Z‡. For svc after hrs call 507–238–9216. Self service fuel with credit card. Migratory bird hazard spring and fall, gulls on and invof arpt. ACTIVATE MIRL Rwy 02–20, HIRL Rwy 13–31, VASI and REIL Rwy 13, VASI and MALSR Rwy 31—122.8.
WEATHER DATA SOURCES: AWOS–3 110.2 FRM (507) 238–1562.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 123.6R 110.2T (PRINCETON RADIO)
MINNEAPOLIS CENTER APP/DEP CON 127.75
AIRSPACE: CLASS E svc Mon–Fri 1130–0130Z‡, Sat 1130–1900Z‡, Sun 1600–2300Z‡ other times CLASS G.
RADIO AIDS TO NAVIGATION: NOTAM FILE FRM.
(L) VOR/DME 110.2 FRM Chan 39 N43°38.76′ W94°25.35′ at fld. 1164/7E. **AWOS–3**
MONTZ NDB (LOM) 420 FQ N43°34.43′ W94°19.08′ 311° 6.0 NM to fld.
ILS 111.1 I-FQJ Rwy 31. LOM MONTZ NDB. Glide Slope unusable for coupled apchs blo 1480′.



FALLS INTL (See INTERNATIONAL FALLS)

FARIBAULT MUNI (FBL) 3 NW UTC−6(−5DT) N44°19.64′ W93°18.65′ OMAHA
1060 B S4 **FUEL** 100LL, JET A OX 4 NOTAM FILE FBL L–12J
RWY 12–30: H4254X72 (ASPH) S–16, D–22 MIRL 0.3% up NW IAP
RWY 12: REIL. VASI(V2L)—GA 3.0° TCH 22′. Trees.
RWY 30: REIL. VASI(V2L)—GA 3.0° TCH 22′. Thld dsplcd 237′. Road.
AIRPORT REMARKS: Attended May–Sep 1400–0100Z‡, Oct–Apr 1400–2300Z‡. For svc after hrs call 507–838–7152. Self svc fuel with credit card. When landing on Rwy 12, be alert for turbulence and possible windshear when winds are out of the south. Ultralights and gliders use twy and extended twy parallel to Rwy 12–30. Ultralights and gliders using twy fly pattern on NE side of Rwy 12–30. ACTIVATE MIRL Rwy 12–30, and REIL Rwy 12 and Rwy 30 —CTAF. VASI Rwy 12 and Rwy 30 on continuously.
WEATHER DATA SOURCES: AWOS–3 111.2 FOW (507) 332–2505.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS APP/DEP CON** 134.7
GCO 121.725 (MINNEAPOLIS CLNC and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
HALFWAY (T) VORW/DME 111.2 FOW Chan 49 N44°12.27′ W93°22.23′ 017° 7.8 NM to fld. 1098/2E. **AWOS–3**. Unmonitored.



FARMINGTON N44°37.86′ W93°10.92′ NOTAM FILE PNM TWIN CITIES
(H) VORTAC 115.7 FGT Chan 104 259° 2 NM to Airlake. 972/6E. H–21, L–12J, 14I, A
VOR unusable:
DME unusable 260°–320° byd 25 NM blo 4000′.
RCO 122.1R 115.7T (PRINCETON RADIO)

RNAV (GPS) RWY 12

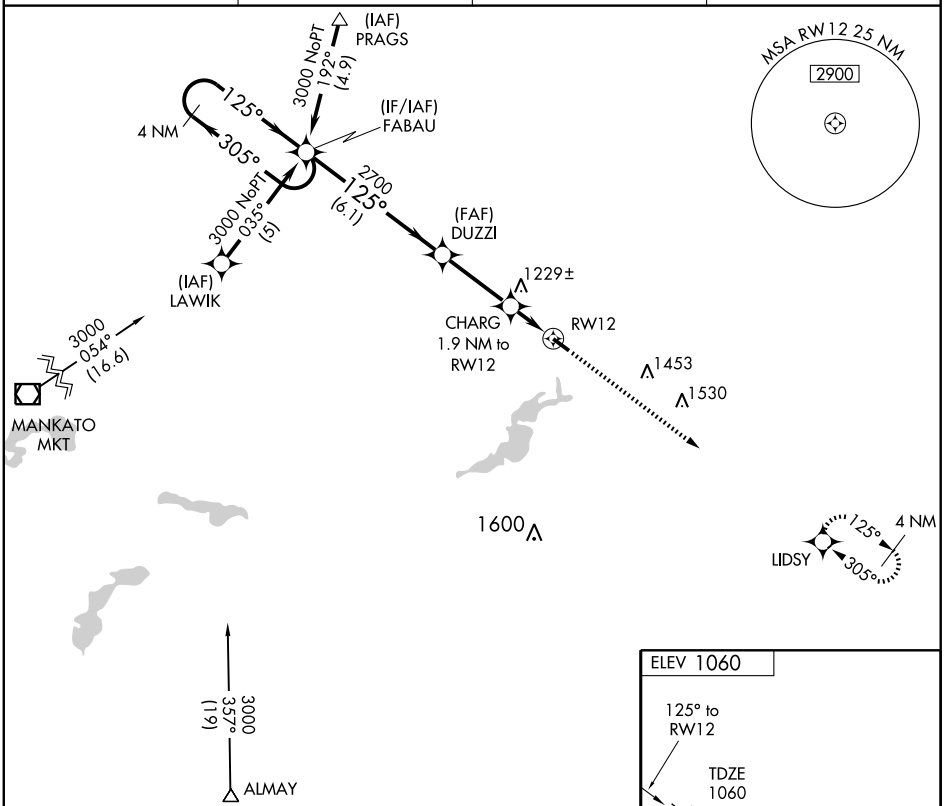
FARIBAULT MUNI (FBL)

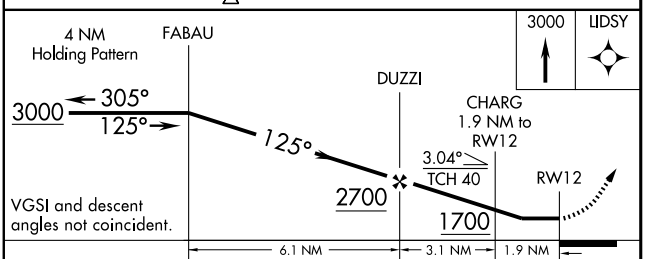
APP CRS	Rwy Idg	4254
125°	TDZE	1060
	Apt Elev	1060

Circling NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Owatonna altimeter setting and increase all MDA 60 feet, and LNAV Cat C visibility ¼ mile.

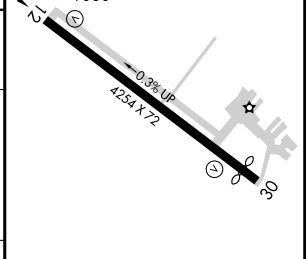
MISSED APPROACH: Climb to 3000 direct LIDSY and hold.

AWOS-3	MINNEAPOLIS APP CON	GCO	UNICOM
111.2	134.7 284.7	121.725	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1520-1 460 (500-1)		1520-1¼ 460 (500-1¼)	NA
CIRCLING	1520-1 460 (500-1)	1540-1 480 (500-1)	1540-1½ 480 (500-1½)	NA



REIL Rwys 12 and 30 L

MIRL Rwy 12-30 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 30

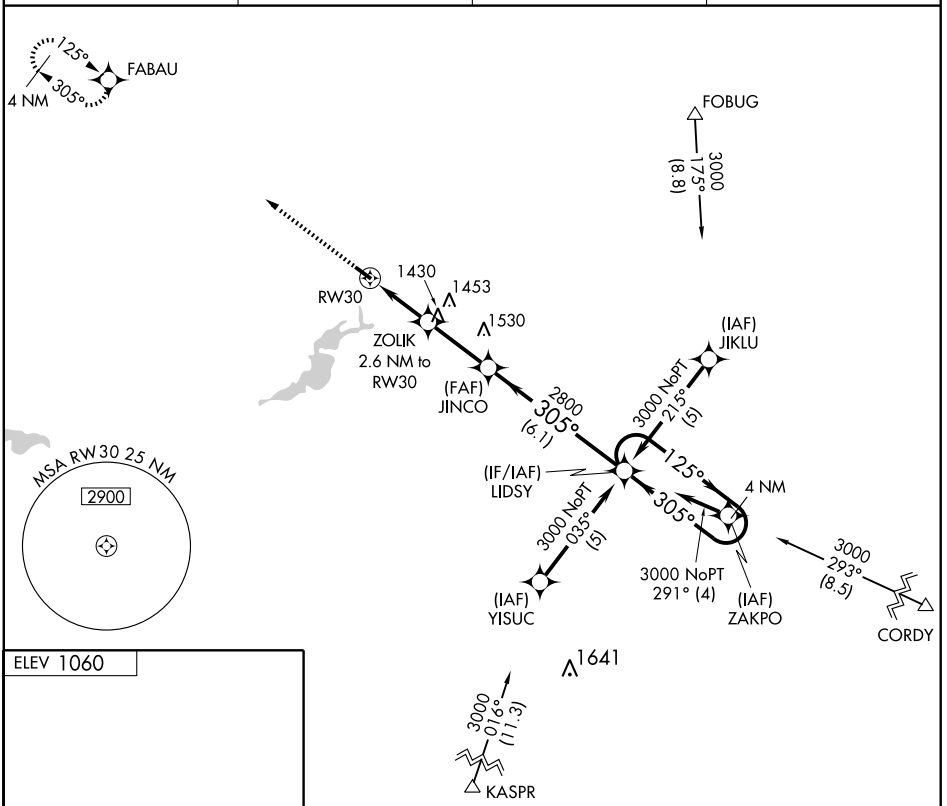
FARIBAULT MUNI (FBL)

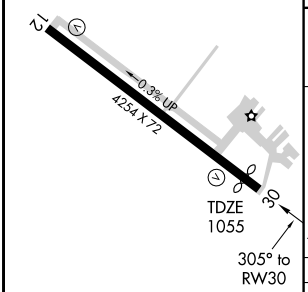
APP CRS	Rwy Idg	4016
305°	TDZE	1055
	Apt Elev	1060

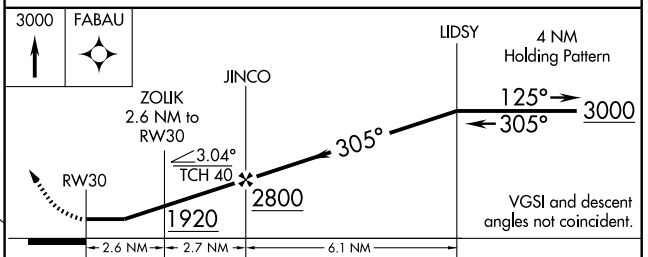
Circling NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Owatonna altimeter setting and increase all MDA 60 feet, and all Cat C visibilities ¼ mile.

MISSED APPROACH: Climb to 3000 direct FABAU and hold.

AWOS-3	MINNEAPOLIS APP CON	GCO	UNICOM
111.2	134.7 284.7	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1680-1	625 (700-1)	1680-1¾ 625 (700-1¾)	NA
CIRCLING	1680-1	620 (700-1)	1680-1¾ 620 (700-1¾)	NA

REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME FOW 111.2 Chan 49	APP CRS 017°	Rwy Idg N/A TDZE N/A Apt Elev 1060

VOR-A

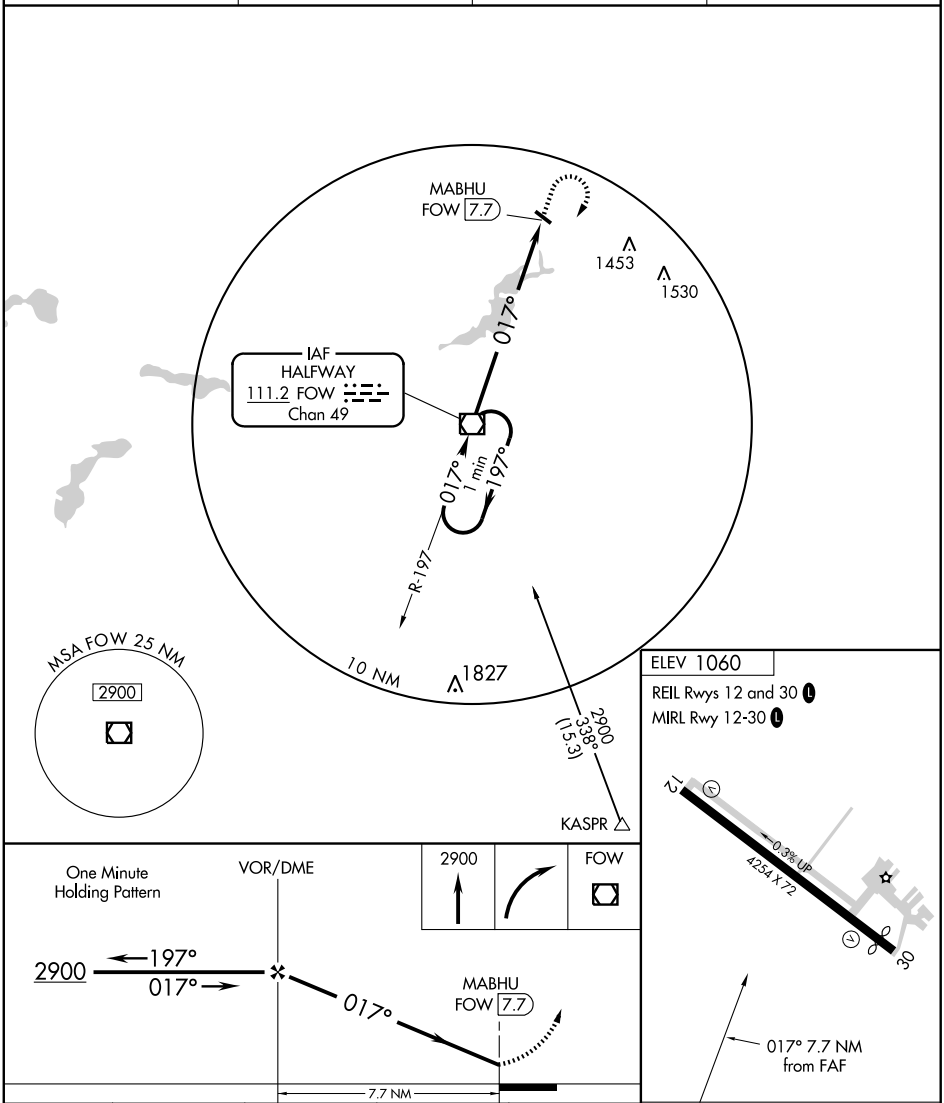
FARIBAULT MUNI (FBL)

When local altimeter setting not received, use Owatonna altimeter setting and increase all MDA 60 feet, and Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 2900 then right turn direct FOW VOR/DME and hold.

AWOS-3	MINNEAPOLIS APP CON	GCO	UNICOM
111.2	134.7 284.7	121.725	122.8 (CTAF) L

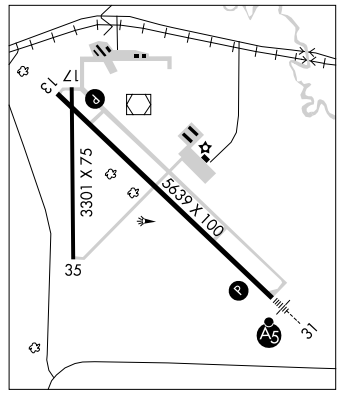
NC-1, 21 OCT 2010 to 18 NOV 2010



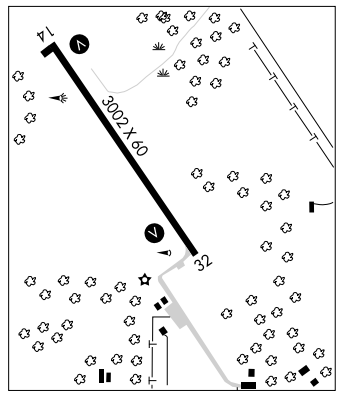
CATEGORY	A	B	C	D
CIRCLING	1680-1 620 (700-1)		1680-1¾ 620 (700-1¾)	NA

FAF to MAP 7.7 NM					
Knots	60	90	120	150	180
Min:Sec	7:42	5:08	3:51	3:05	2:34

FERGUS FALLS MUNI–EINAR MICKELSON FLD (FFM) 3 W UTC−6(−5DT) TWIN CITIES
N46°17.06′ W96°09.40′ H–2I, L–14H
1183 B S2 **FUEL** 100LL, JET A, MOGAS NOTAM FILE FFM IAP
RWY 13–31: H5639X100 (ASPH) S–60, D–90, 2S–114 MIRL
RWY 13: REIL. PAPI(P4L). P–line. **RWY 31:** MALSR. PAPI(P4L).
RWY 17–35: H3301X75 (ASPH) S–16, D–22 MIRL 0.8% up N
RWY 17: Trees. **RWY 35:** REIL.
AIRPORT REMARKS: Attended Mon–Fri 1300–0100Z‡, Sat 1400–1800Z‡. For attendant after hrs call 218–739–9217 or 218–731–9546. Ultralights on and invof arpt. Ultralight pattern 1800(617). Deer and waterfowl on and invof arpt. Rwy 13 PAPI OTS indef. PAPI not coincident with Rwy 31 ILS glide slope. ACTIVATE MIRL Rwy 13–31 and Rwy 17–35, MALSR and PAPI Rwy 31, REIL Rwy 35, REIL and PAPI Rwy 13—CTAF.
WEATHER DATA SOURCES: AWOS–3 110.4 FFM (218) 736–7216.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.35 (PRINCETON RADIO)
RADIO AIDS TO NAVIGATION: NOTAM FILE FFM.
(T) VORW/DME 110.4 FFM Chan 41 N46°17.36′ W96°09.41′ at fld. 1201/5E. **AWOS–3**. Unmonitored.
HAMRE NDB (LOM) 337 FF N46°13.24′ W96°03.42′ 308° 5.7 NM to fld.
ILS 111.5 I-FFM Rwy 31. LOM HAMRE NDB. GS unusable for coupled approaches blo 1400′ MSL.



FERTILE MUNI (D14) 1 NW UTC−6(−5DT) N47°33.12′ W96°17.53′ TWIN CITIES
1135 B **FUEL** 100LL TPA—2135(1000) NOTAM FILE PNM L–14H
RWY 14–32: H3002X60 (ASPH) LIRL
RWY 14: SAVASI(S2L)—GA 3.0°.
RWY 32: SAVASI(S2L)—GA 3.0°.
AIRPORT REMARKS: Unattended. Fuel avbl 24 hr with credit card. Be alert for vehicle tfc on twys. Rwy 14–32 bleached. ACTIVATE LIRL Rwy 14–32, VASI Rwy 14 and Rwy 32—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8
RADIO AIDS TO NAVIGATION: NOTAM FILE TVF.
THIEF RIVER FALLS (L) VOR/DME 108.4 TVF Chan 21 N48°04.16′ W96°11.19′ 180° 31.4 NM to fld. 1039/8E.



FIELD OF DREAMS (See HINCKLEY)

FILLMORE CO (See PRESTON)

FLAG ISLAND FGN N49°19.00′ W94°54.00′/1080. TWIN CITIES
AWOS–3 118.375 218–223–4023. H–2I

FLYING A (See CHATFIELD)

FLYING CLOUD (See MINNEAPOLIS)

FLYING CLOUD N44°49.52′ W93°26.56′ NOTAM FILE FCM. TWIN CITIES
(L) VOR/DME 117.7 FCM Chan 124 at Flying Cloud Arpt. 900/1E
VOR/DME unusable 290°–305° blo 4000′. H–2I, L–12J, 14H, A

LOC I-FFM	APP CRS		
111.5	308°	Rwy Idg	5639
		TDZE	1182
		Apt Elev	1183

ILS or LOC RWY 31

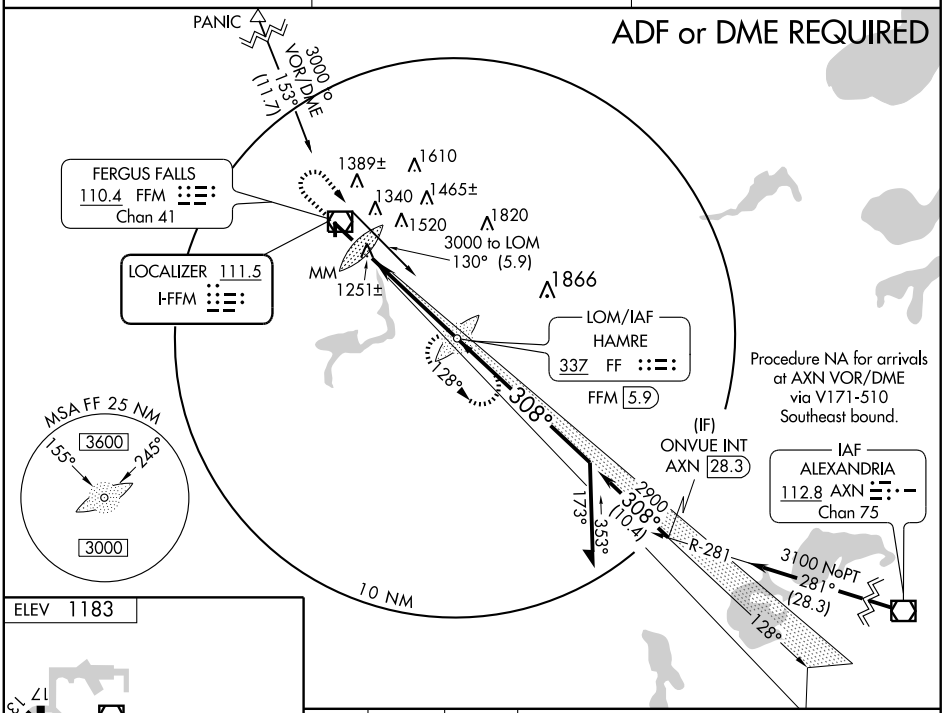
FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)

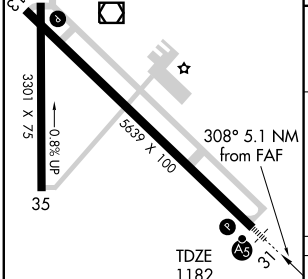
When local altimeter setting not received, use Wheaton altimeter setting and increase all DA 102 feet and all MDA 120 feet, increase S-LOC 31 and Circling Cat C and D visibility ½ mile. For inoperative MALSR, increase S-LOC 31 Cat D visibility ¼ mile. For inoperative MALSR when using Wheaton altimeter setting, increase S-ILS 31 all Cats visibility ½ mile. GS unusable for coupled approaches below 1400.

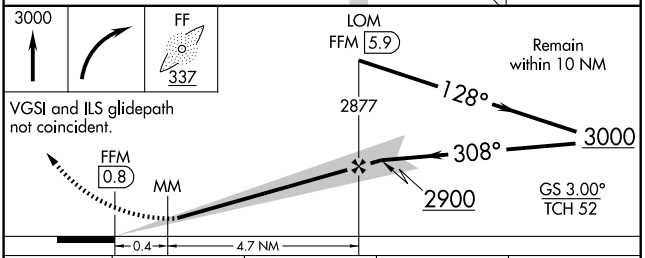
MALSR

MISSED APPROACH: Climb to 3000 then right turn direct HAMRE LOM/FFM 5.9 DME and hold.

AWOS-3	PRINCETON RADIO	UNICOM
110.4	122.35	122.8 (CTAF) L







REIL Rwys 13 and 35 L
MIRL Rwys 13-31 and 17-35 L

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

CATEGORY	A	B	C	D
S-ILS 31	1382-½ 200 (200-½)			
S-LOC 31	1520-½ 338 (400-½)			1520-¾ 338 (400-¾)
CIRCLING	1640-1 457 (500-1)	1740-1 557 (600-1)	1740-1½ 557 (600-1½)	1880-2¼ 697 (700-2¼)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOM FF	APP CRS	Rwy Idg	5639
337	309°	TDZE	1182
		Apt Elev	1183

NDB RWY 31

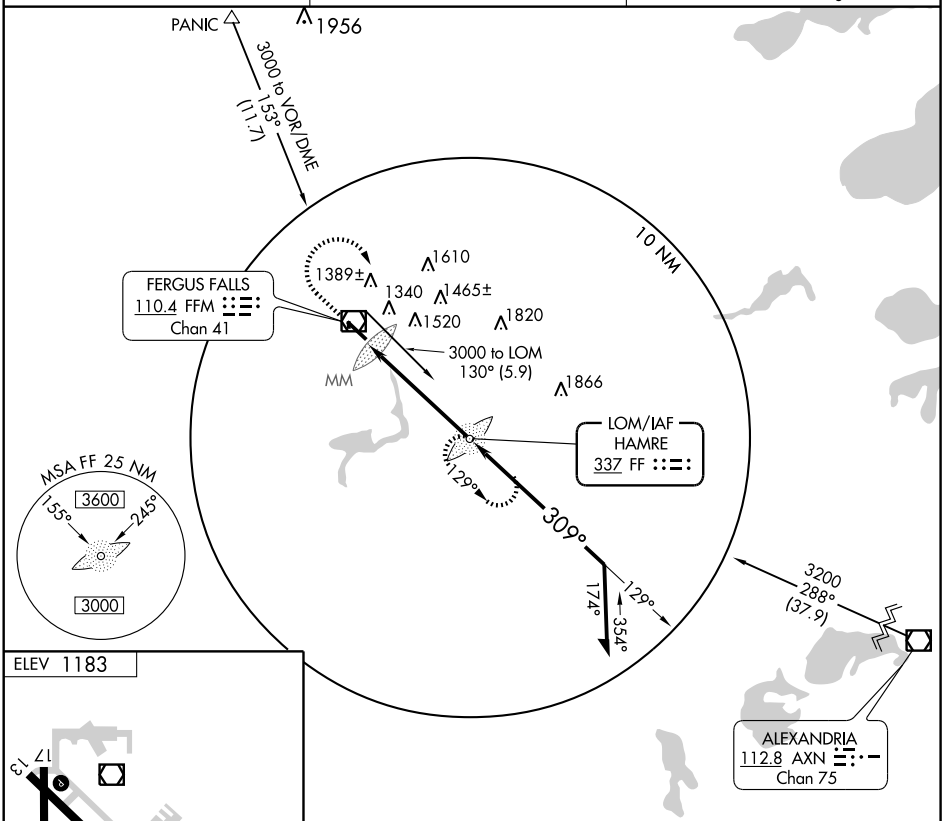
FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)

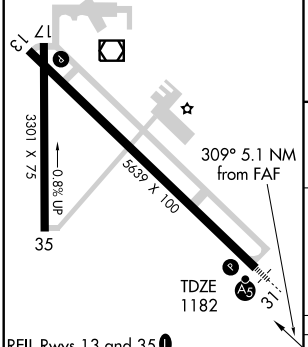
When local altimeter setting not received, use Wheaton altimeter setting and increase all MDA 120 feet, S-31 and Circling Cats C and D visibility ½ mile, Circling Cat B ¼ mile. For inoperative MALSR when using Wheaton altimeter setting, increase S-31 Cat B visibility ½ mile.

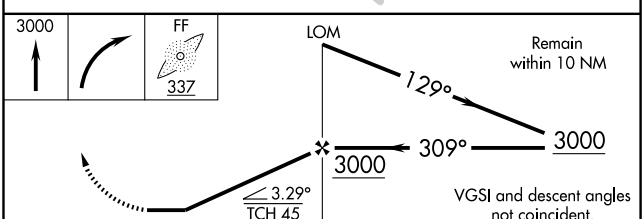
MALSR

MISSED APPROACH: Climb to 3000 then right turn direct FF LOM and hold.

AWOS-3	PRINCETON RADIO	UNICOM
110.4	122.35	122.8 (CTAF)







REIL Rwys 13 and 35 (L)
MIRL Rwys 13-31 and 17-35 (L)

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

CATEGORY	A	B	C	D
S-31	1880-¾ 698 (700-¾)		1880-1½ 698 (700-1½)	1880-2 698 (700-2)
CIRCLING	1880-1 697 (700-1)		1880-2 697 (700-2)	1880-2¼ 697 (700-2¼)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	5639
CH 42614	308°	TDZE	1182
W31A		Apt Elev	1183

RNAV (GPS) RWY 31

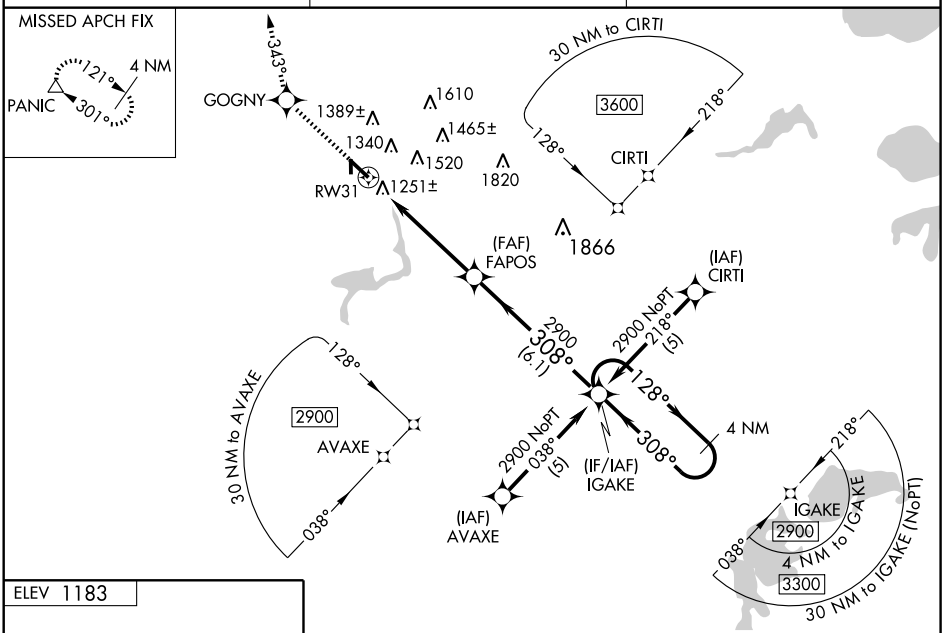
FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)

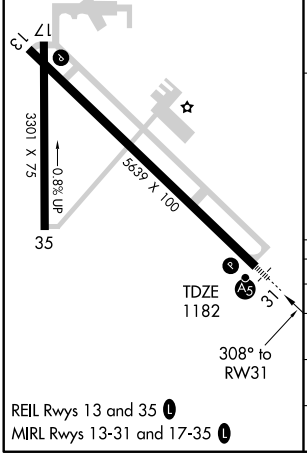
T A Inoperative table does not apply to LNAV Cat D. Baro-VNAV NA when using Wheaton altimeter setting. DME/DME RNP-0.3 NA. When local altimeter settting not received, use Wheaton altimeter setting and increase all DA 102 feet and all MDA 120 feet, LNAV/VNAV all Cats and Circling Cats C and D visibility ½ mile and LNAV Cat C ¼ mile. For inoperative MALSR when using Wheaton altimeter setting, increase LPV all Cats visibility ½ mile.

MALSR

MISSED APPROACH: Climb to 3000 direct GOGNY and via track 343° to PANIC and hold.

AWOS-3	PRINCETON RADIO	UNICOM
110.4	122.35	122.8 (CTAF) L



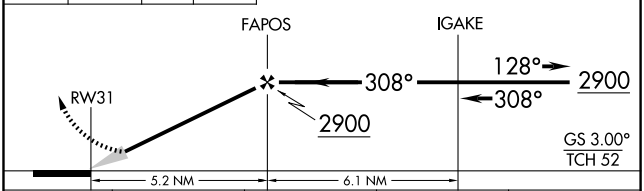


REIL Rwys 13 and 35 L
MIRL Rwys 13-31 and 17-35 L

3000	GOGNY	343° TRK	PANIC

VGSI and RNAV glidepath not coincident.

4 NM Holding Pattern



CATEGORY	A	B	C	D
LPV DA	1382-½ 200 (200-½)			
LNAV/VNAV DA	1545-¾ 363 (400-¾)			
LNAV MDA	1520-½ 338 (400-½)			1520-1 338 (400-1)
CIRCLING	1640-1 457 (500-1)	1740-1 557 (600-1)	1740-1½ 557 (600-1½)	1880-2¼ 697 (700-2¼)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	3301
354°	TDZE	1182
	Apt Elev	1183

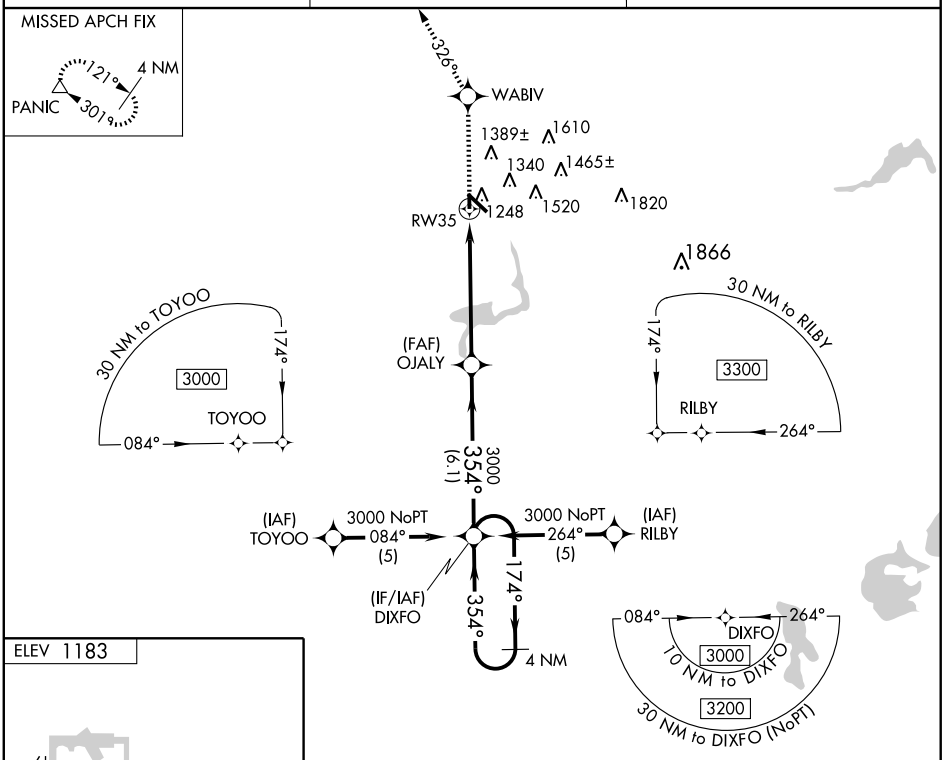
RNAV (GPS) RWY 35

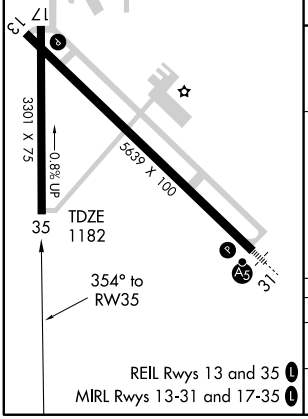
FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)

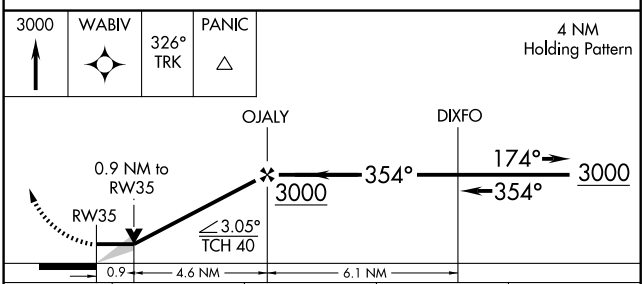
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Wheaton altimeter setting and increase all MDA 120 feet and LNAV Cat C visibility ¼ mile, Circling Cat C ½ mile. VDP NA when using Wheaton altimeter setting.

MISSED APPROACH: Climb to 3000 direct WABIV and via track 326° to PANIC and hold.

AWOS-3	PRINCETON RADIO	UNICOM
110.4	122.35	122.8 (CTAF)







CATEGORY	A	B	C	D
LNAV MDA	1500-1 318 (400-1)			NA
CIRCLING	1640-1 457 (500-1)	1740-1 557 (600-1)	1740-1½ 557 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME FFM	APP CRS	Rwy Idg	5639
110.4	115°	TDZE	1182
Chan 41		Apt Elev	1183

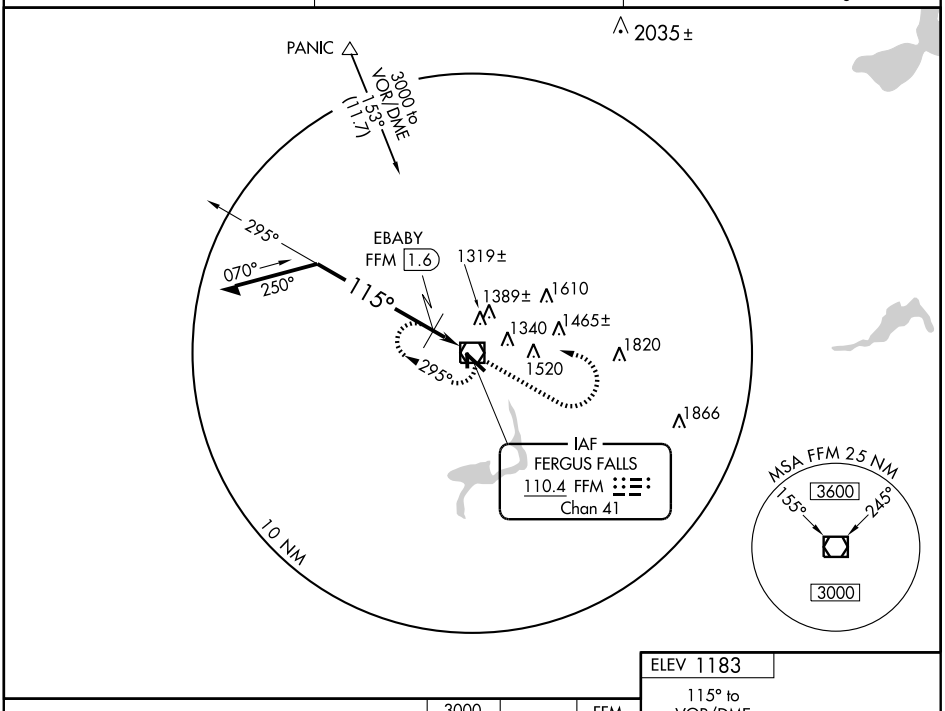
VOR RWY 13

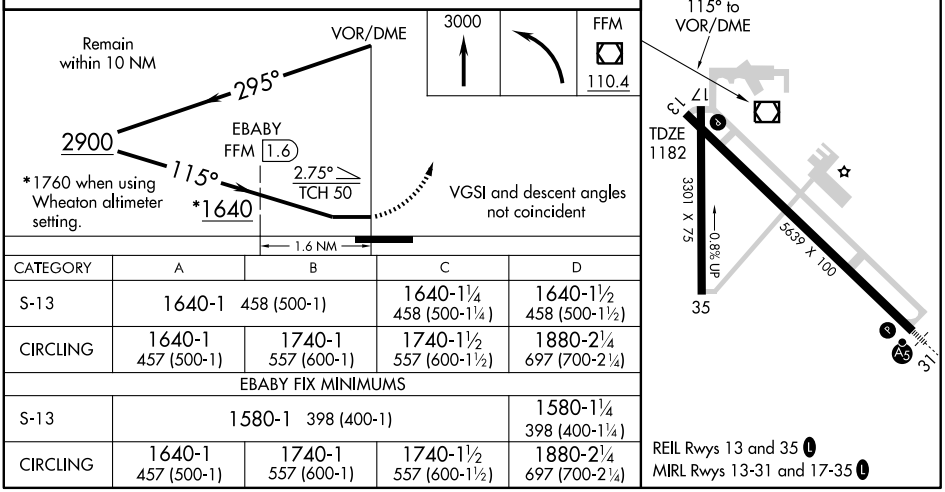
FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)

Cat D straight-in minima NA when using Wheaton altimeter setting. When local altimeter setting not received, use Wheaton altimeter setting and increase all MDA 120 feet, and S-13 Cat C and D visibility ¼ mile, Circling Cat C and D visibility ½ mile, increase EBABY FIX minimums S-13 and Circling Cat C and D visibility ½ mile.

MISSED APPROACH: Climb to 3000 then left turn direct FFM VOR/DME and hold.

AWOS-3	PRINCETON RADIO	UNICOM
110.4	122.35	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-13	1640-1 458 (500-1)		1640-1¼ 458 (500-1¼)	1640-1½ 458 (500-1½)
CIRCLING	1640-1 457 (500-1)	1740-1 557 (600-1)	1740-1½ 557 (600-1½)	1880-2¼ 697 (700-2¼)
EBABY FIX MINIMUMS				
S-13	1580-1 398 (400-1)			1580-1¼ 398 (400-1¼)
CIRCLING	1640-1 457 (500-1)	1740-1 557 (600-1)	1740-1½ 557 (600-1½)	1880-2¼ 697 (700-2¼)

REIL Rwys 13 and 35 L
MIRL Rwys 13-31 and 17-35 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME FFM	APP CRS	Rwy Idg	3301
110.4	004°	TDZE	1182
Chan 41		Apt Elev	1183

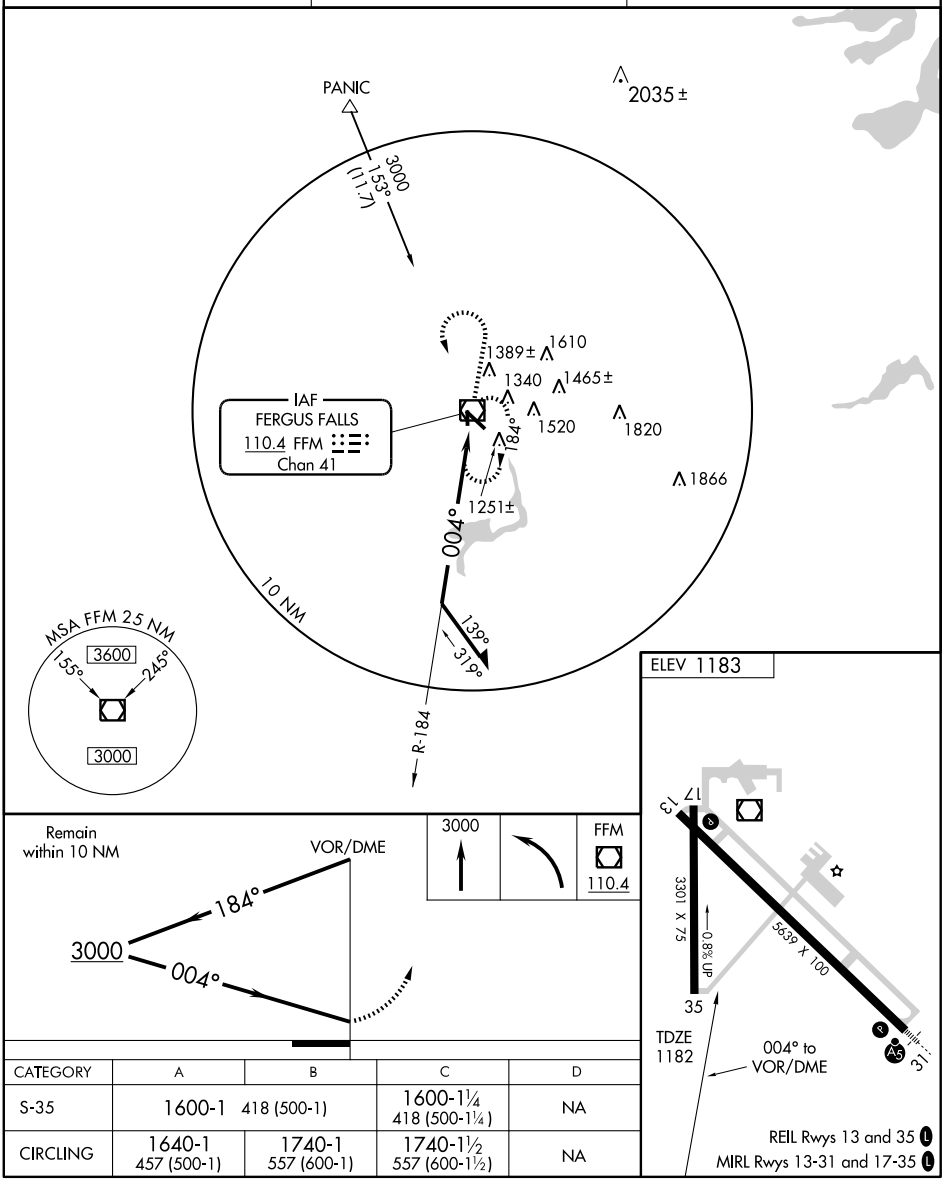
VOR RWY 35

FERGUS FALLS MUNI-EINAR MICKELSON FIELD (FFM)

When local altimeter setting not received, use Wheaton altimeter setting and increase all MDA 120 feet, S-35 Cat C visibility ¼ mile and Circling Cat C visibility ½ mile

MISSED APPROACH: Climb to 3000 then left turn direct FFM VOR/DME and hold.

AWOS-3	PRINCETON RADIO	UNICOM
110.4	122.35	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-35	1600-1 418 (500-1)		1600-1¼ 418 (500-1¼)	NA
CIRCLING	1640-1 457 (500-1)	1740-1 557 (600-1)	1740-1½ 557 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

FOREST LAKE (25D) 2 SW UTC−6(−5DT) N45°14.86′ W92°59.66′ **GREEN BAY**

925 B S5 **FUEL** 100LL TPA—1925(1000) NOTAM FILE PNM

RWY 13–31: 2650X150 (TURF) LIRL

RWY 13: Trees.

AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs self service with credit card. Rwy 13–31 marked with yellow cones. Rwy 31 is calm wind rwy.

COMMUNICATIONS: CTAF/UNICOM 122.7

FOSSTON MUNI (FSE) 1 NW UTC−6(−5DT) N47°35.57′ W95°46.41′ **TWIN CITIES L–14H IAP**

1277 B **FUEL** 100LL NOTAM FILE FSE

RWY 16–34: H3501X75 (ASPH) S–12.5 MIRL (NSTD) 0.3% up SE

RWY 16: REIL. PAPI(P4L)—GA 2.8° TCH 25. Trees.

RWY 34: REIL. PAPI(P4L)—GA 2.8° TCH 25. Road.

AIRPORT REMARKS: Unattended. Self svc fuel avbl with credit card. Auto traffic occasionally on arpt to and from private seaplane dock NW of arpt. Private seaplane facility NW of arpt. NSTD MIRL Rwy 16–34, Rwy 34 lgts not amber last half of rwy. MIRL Rwy 16–34 preset low ints to increase ints and ACTIVATE PAPI and REIL Rwy 16 and Rwy 34—CTAF.

WEATHER DATA SOURCES: AWOS–3 224 FSE (218) 435–6448.

COMMUNICATIONS: CTAF 122.9

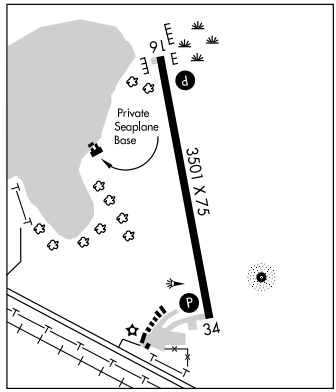
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 134.75

GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE TVF.

THIEF RIVER FALLS (L) VOR/DME 108.4 TVF Chan 21
N48°04.16′ W96°11.19′
142° 33.1 NM to fld. 1039/8E.

NDB (MHW) 224 FSE N47°35.38′ W95°46.19′ at fld.
AWOS–3. NOTAM FILE FSE.



GALEX N47°07.82′ W93°28.88′ NOTAM FILE GPZ. **TWIN CITIES**

NDB (LOM) 272 GP 344° 5.0 NM to Grand Rapids/Itasca Co Gordon Newstrom Fld.

GARNO N44°30.11′ W95°54.68′ NOTAM FILE MML. **OMAHA**

NDB (LOM) 253 GB 124° 4.8 NM to Southwest Minnesota Rgnl Marshall/Ryan Fld.

GLENCOE MUNI (GYL) 3 SE UTC−6(−5DT) N44°45.36′ W94°04.87′ **TWIN CITIES L–12I, 14H IAP**

992 B **FUEL** 100LL TPA—1792(800) NOTAM FILE GYL

RWY 13–31: H3300X75 (ASPH) MIRL

RWY 13: Trees. **RWY 31:** Trees.

AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Deer on and invof rwy dusk to dawn. ACTIVATE MIRL Rwy 13–31 preset to low ints, to increase ints—CTAF.

WEATHER DATA SOURCES: AWOS–3 407 GYL (320) 864–5830.

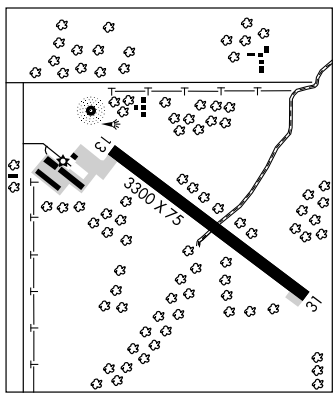
COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ **MINNEAPOLIS APP/DEP CON** 134.7

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

DARWIN (L) VORTAC 109.0 DWN Chan 27 N45°05.25′ W94°27.23′ 134° 25.5 NM to fld. 1130/7E.

NDB (MHW) 407 GYL N44°45.65′ W94°05.15′ at fld.
AWOS–3. NOTAM FILE GYL.



NDB or GPS RWY 34

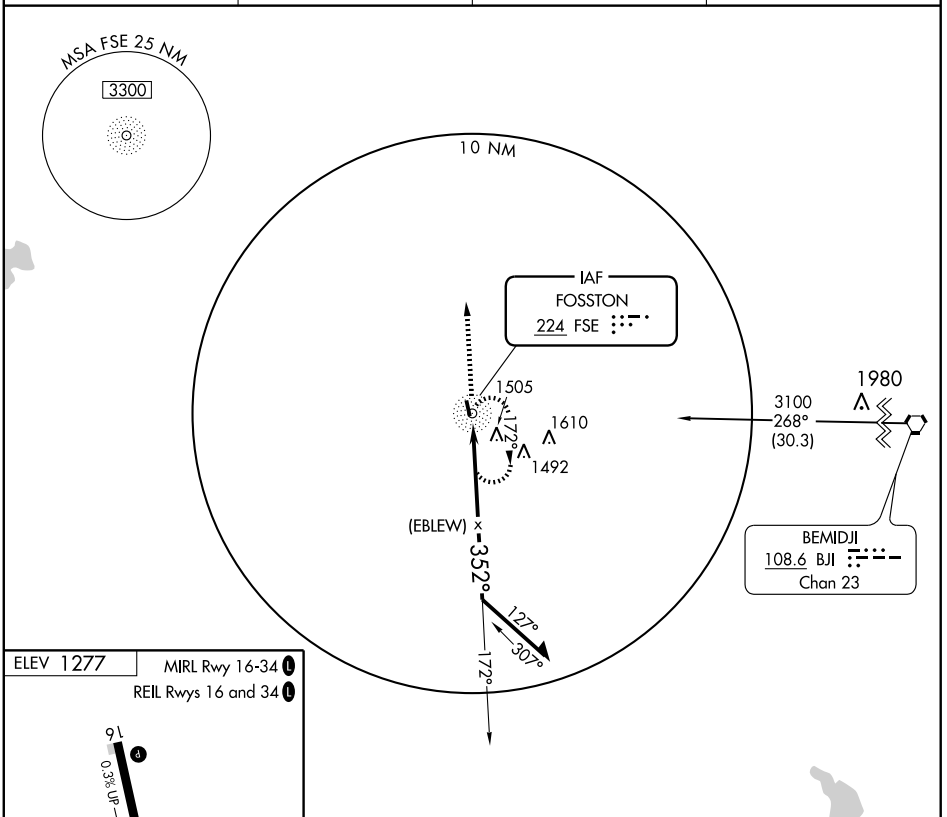
FOSSTON MUNI (FSE)

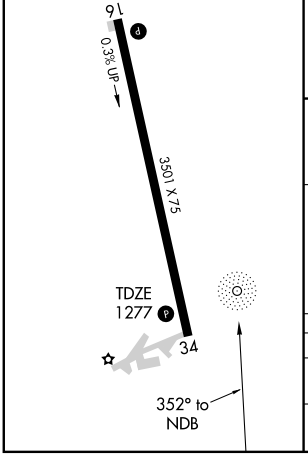
NDB FSE	APP CRS	Rwy Idg	3501
224	352°	TDZE	1277
		Apt Elev	1277

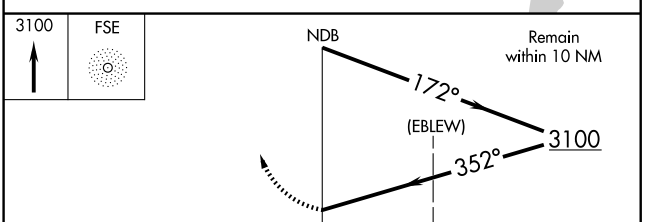
NA

MISSED APPROACH: Climb to 3100 then direct FSE NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
224	134.75 251.1	121.725	122.9 L







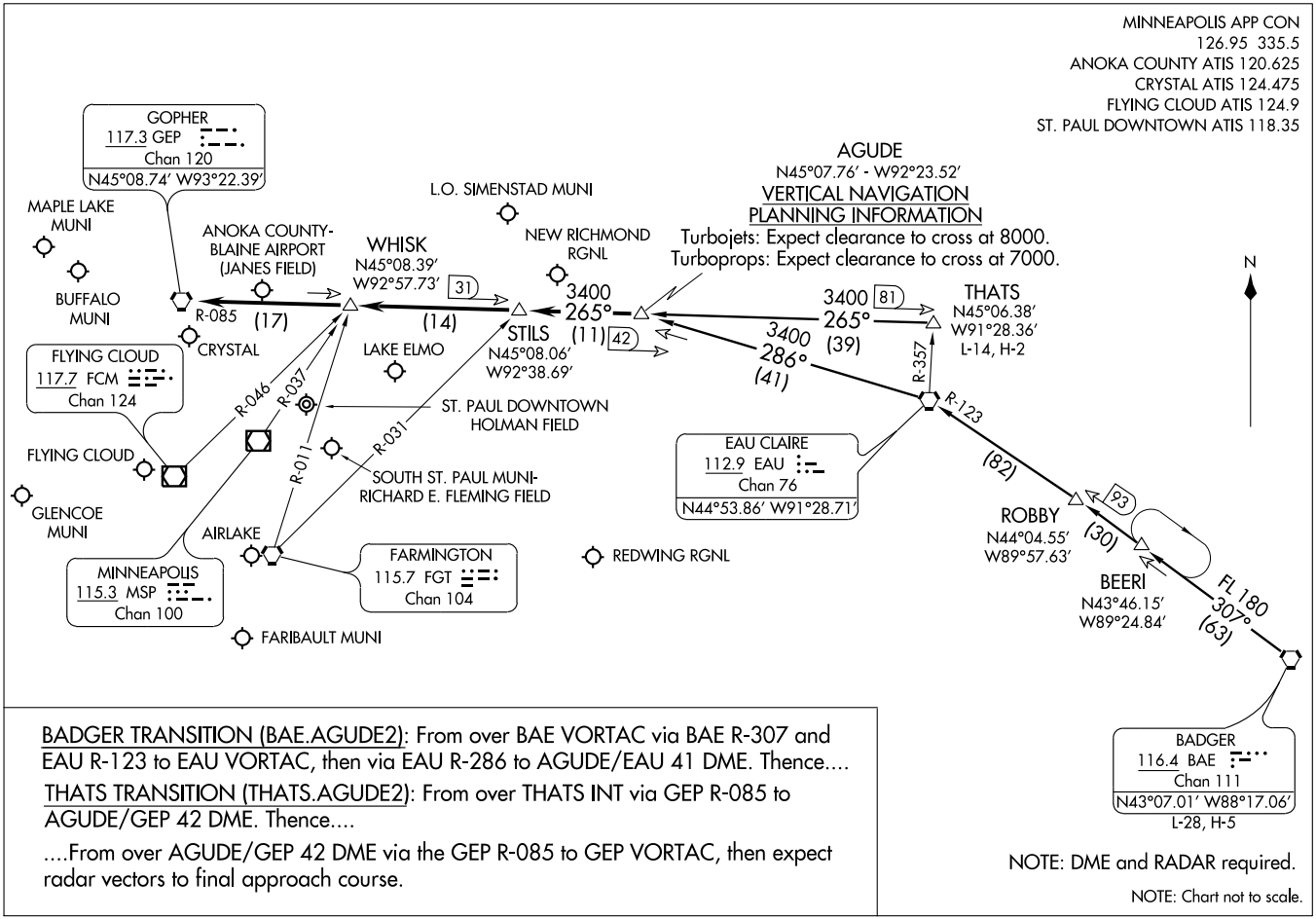
CATEGORY	A	B	C	D
S-34	1960-1	683 (700-1)	1960-2 683 (700-2)	NA
CIRCLING	1960-1	683 (700-1)	1960-2 683 (700-2)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

AGUDE TWO ARRIVAL

(AGUDE.AGUDE2) 10154

MINNEAPOLIS-ST. PAUL, MINNESOTA



BADGER TRANSITION (BAE.AGUDE2): From over BAE VORTAC via BAE R-307 and EAU R-123 to EAU VORTAC, then via EAU R-286 to AGUDE/EAU 41 DME. Thence....

THATS TRANSITION (THATS.AGUDE2): From over THATS INT via GEP R-085 to AGUDE/GEP 42 DME. Thence....

....From over AGUDE/GEP 42 DME via the GEP R-085 to GEP VORTAC, then expect radar vectors to final approach course.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

(AGUDE.AGUDE2) 10154

AGUDE TWO ARRIVAL

ST-263 (FAA)

MINNEAPOLIS-ST. PAUL, MINNESOTA

FOREST LAKE (25D) 2 SW UTC−6(−5DT) N45°14.86′ W92°59.66′ **GREEN BAY**

925 B S5 **FUEL** 100LL TPA—1925(1000) NOTAM FILE PNM

RWY 13–31: 2650X150 (TURF) LIRL

RWY 13: Trees.

AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs self service with credit card. Rwy 13–31 marked with yellow cones. Rwy 31 is calm wind rwy.

COMMUNICATIONS: CTAF/UNICOM 122.7

FOSSTON MUNI (FSE) 1 NW UTC−6(−5DT) N47°35.57′ W95°46.41′ **TWIN CITIES L–14H IAP**

1277 B **FUEL** 100LL NOTAM FILE FSE

RWY 16–34: H3501X75 (ASPH) S–12.5 MIRL (NSTD) 0.3% up SE

RWY 16: REIL. PAPI(P4L)—GA 2.8° TCH 25. Trees.

RWY 34: REIL. PAPI(P4L)—GA 2.8° TCH 25. Road.

AIRPORT REMARKS: Unattended. Self svc fuel avbl with credit card. Auto traffic occasionally on arpt to and from private seaplane dock NW of arpt. Private seaplane facility NW of arpt. NSTD MIRL Rwy 16–34, Rwy 34 lgts not amber last half of rwy. MIRL Rwy 16–34 preset low ints to increase ints and ACTIVATE PAPI and REIL Rwy 16 and Rwy 34—CTAF.

WEATHER DATA SOURCES: AWOS–3 224 FSE (218) 435–6448.

COMMUNICATIONS: CTAF 122.9

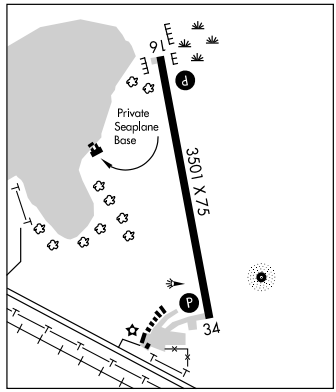
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 134.75

GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE TVF.

THIEF RIVER FALLS (L) VOR/DME 108.4 TVF Chan 21
N48°04.16′ W96°11.19′
142° 33.1 NM to fld. 1039/8E.

NDB (MHW) 224 FSE N47°35.38′ W95°46.19′ at fld.
AWOS–3. NOTAM FILE FSE.



GALEX N47°07.82′ W93°28.88′ NOTAM FILE GPZ. **TWIN CITIES**

NDB (LOM) 272 GP 344° 5.0 NM to Grand Rapids/Itasca Co Gordon Newstrom Fld.

GARNO N44°30.11′ W95°54.68′ NOTAM FILE MML. **OMAHA**

NDB (LOM) 253 GB 124° 4.8 NM to Southwest Minnesota Rgnl Marshall/Ryan Fld.

GLENCOE MUNI (GYL) 3 SE UTC−6(−5DT) N44°45.36′ W94°04.87′ **TWIN CITIES L–12I, 14H IAP**

992 B **FUEL** 100LL TPA—1792(800) NOTAM FILE GYL

RWY 13–31: H3300X75 (ASPH) MIRL

RWY 13: Trees. **RWY 31:** Trees.

AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Deer on and invof rwy dusk to dawn. ACTIVATE MIRL Rwy 13–31 preset to low ints, to increase ints—CTAF.

WEATHER DATA SOURCES: AWOS–3 407 GYL (320) 864–5830.

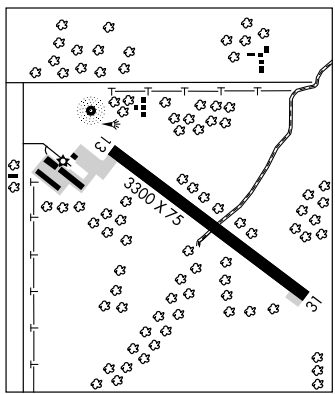
COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ **MINNEAPOLIS APP/DEP CON** 134.7

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

DARWIN (L) VORTAC 109.0 DWN Chan 27 N45°05.25′ W94°27.23′ 134° 25.5 NM to fld. 1130/7E.

NDB (MHW) 407 GYL N44°45.65′ W94°05.15′ at fld.
AWOS–3. NOTAM FILE GYL.



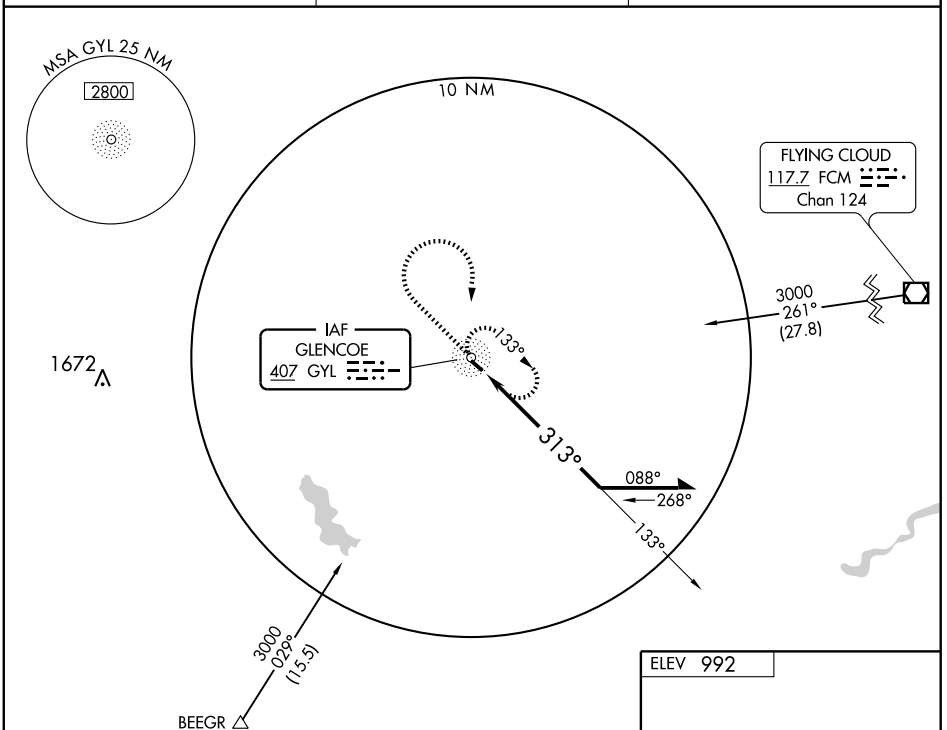
NDB GYL 407	APP CRS 313°	Rwy Idg 3300 TDZE 991 Apt Elev 992

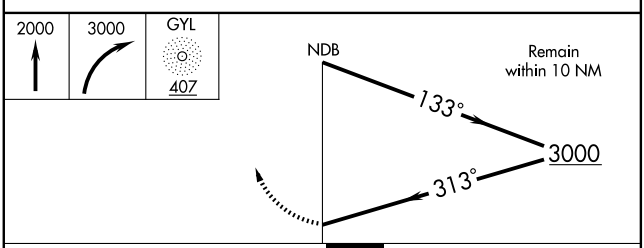
NDB RWY 31
GLENCOE MUNI (GYL)

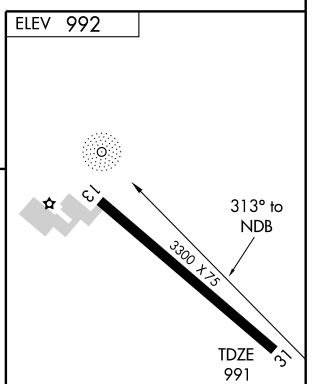
Visibility reduction by helicopters NA. When local altimeter setting not received, use Hutchison altimeter setting and increase all MDA 60 feet.

MISSSED APPROACH: Climb to 2000 then climbing right turn to 3000 direct GYL NDB and hold, continue climb-in-hold to 3000.

AWOS-3	MINNEAPOLIS APP CON	UNICOM
407	134.7 284.7	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-31	1580-1	589 (600-1)	NA	
CIRCLING	1580-1	588 (600-1)	NA	

MIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	3300
308°	TDZE	991
	Apt Elev	992

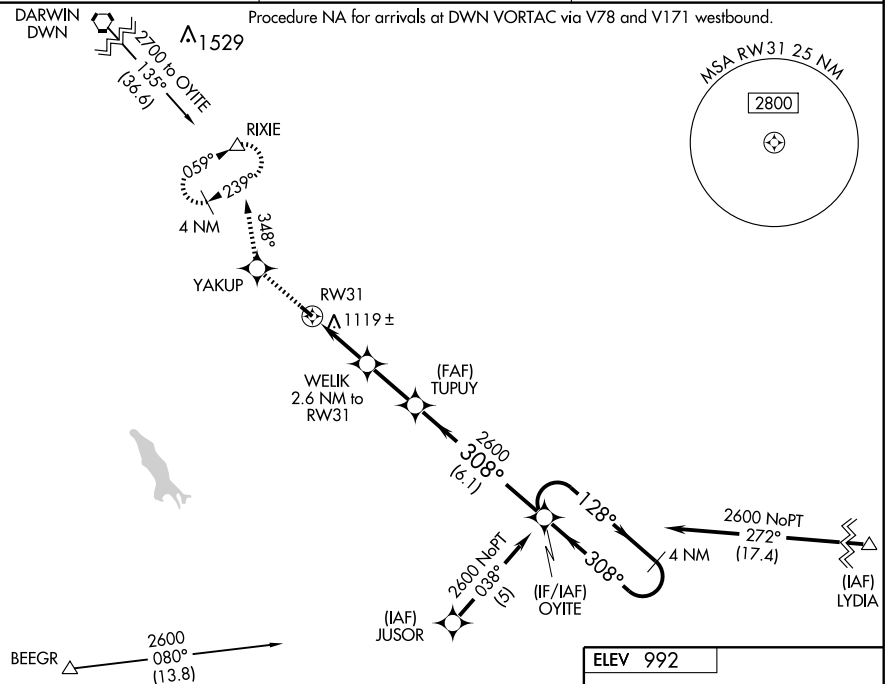
RNAV (GPS) RWY 31
GLENCOE MUNI (GYL)

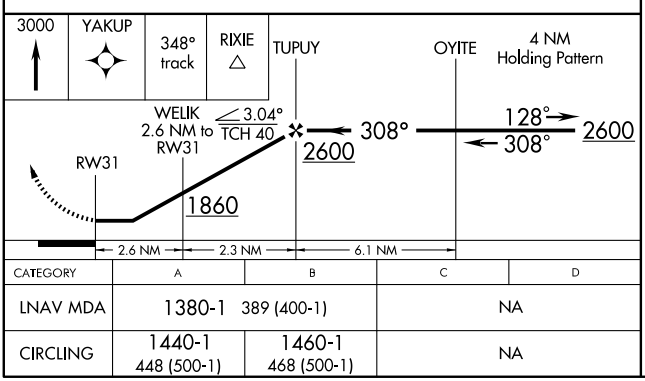
DME DME/RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Hutchinson altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 3000 direct YAKUP and via 348° track to RIXIE and hold, continue climb-in-hold to 3000.

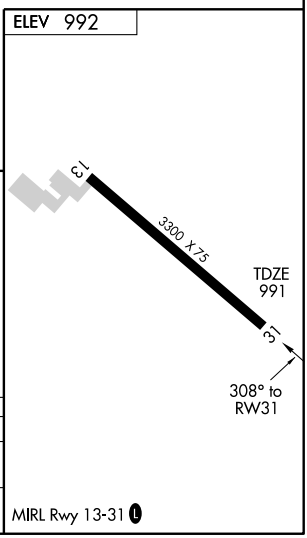
AWOS-3	MINNEAPOLIS APP CON	UNICOM
407	134.7 284.7	122.8 (CTAF) L

Procedure NA for arrivals at DWN VORTAC via V78 and V171 westbound.



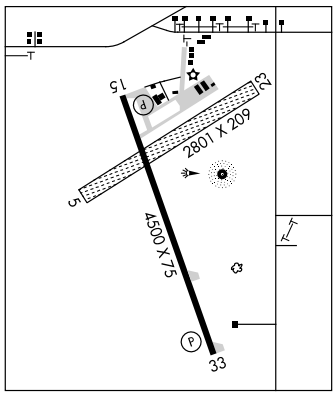


CATEGORY	A	B	C	D
LNAV MDA	1380-1	389 (400-1)	NA	
CIRCLING	1440-1 448 (500-1)	1460-1 468 (500-1)	NA	



NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

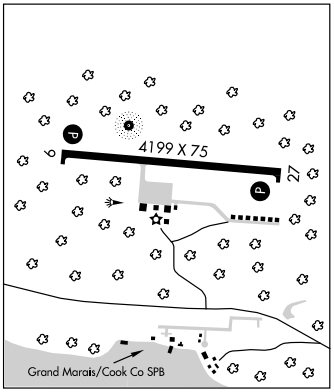
GLENWOOD MUNI (GHW) 3 E UTC−6(−5DT) N45°38.63′ W95°19.23′ — TWIN CITIES
1393 B **FUEL** 100LL NOTAM FILE GHW — L–14H
RWY 15–33: H4500X75 (ASPH) LIRL 0.4% up NW — IAP
RWY 15: PAPI(P4L). GA 3.0° TCH 33′.
RWY 33: PAPI(P4L). GA 3.0° TCH 25′.
RWY 05–23: 2801X209 (TURF) 0.5% up NE
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. For fuel call 320–634–4772. Deer on and invof arpt. Rwy 05–23 CLOSED winter months. Rwy 05–23 marked with 'A' frames.
WEATHER DATA SOURCES: AWOS–3 346 GHW (320) 634–5660.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 126.1
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE AXN.
ALEXANDRIA (L) VORW/DME 112.8 AXN Chan 75 N45°57.50′ W95°13.96′ 184° 19.2 NM to fld. 1367/7E. **HIWAS.**
NDB (MHW) 346 GHW N45°38.66′ W95°19.11′ at fld. **AWOS–3**. NOTAM FILE GHW. VFR only.



GOPHER N45°08.74′ W93°22.39′ NOTAM FILE PNM. — TWIN CITIES
(H) VORTACW 117.3 GEP Chan 120 165° 5.1 NM to Crystal. 877/6E. **HIWAS.** — H–2I, L–12J, 14I, A

GRAND MARAIS

GRAND MARAIS/COOK CO (CKC) 7 NW UTC−6(−5DT) N47°50.30′ W90°22.98′ — GREEN BAY
1799 B S4 **FUEL** 100LL, JET A LRA NOTAM FILE CKC — L–14I
RWY 09–27: H4199X75 (ASPH) MIRL — IAP
RWY 09: REIL. PAPI(P4L). Trees.
RWY 27: REIL. PAPI(P4L). Trees.
AIRPORT REMARKS: Attended 1400–2300Z‡. For svc after hrs call 218–387–3024. ACTIVATE MIRL Rwy 09–27, PAPI Rwy 09 and Rwy 27 and REIL Rwy 09 and Rwy 27—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.925 (218) 387–1971.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.3 (PRINCETON RADIO)
RADIO AIDS TO NAVIGATION: NOTAM FILE IWD.
IRONWOOD (L) VORTACW 108.8 IWD Chan 25 N46°31.94′ W90°07.55′ 351° 79.1 NM to fld. 1230/1E. **HIWAS.**
COOK COUNTY NDB (MHW) 358 CKC N47°50.40′ W90°23.14′ at fld. NOTAM FILE CKC.



GRAND MARAIS/COOK CO SPB (ØG5) 6 NW UTC−6(−5DT) N47°49.37′ W90°24.44′ — GREEN BAY
1635 S4 **FUEL** 100LL, JET A LRA NOTAM FILE PNM
WATERWAY 09–27: 15000X1500 (WATER)
WATERWAY 03–21: 3000X2000 (WATER)
SEAPLANE REMARKS: Attended 1400–2300Z‡. For fuel ctc arpt on 122.8 or call 218–387–2012. Customs avbl May 15–Oct 15 or by prior arrangement, call 218–475–2244.
COMMUNICATIONS: CTAF/UNICOM 122.8
GRAND MARAIS RCO 122.3 (PRINCETON RADIO)

GPS RWY 33

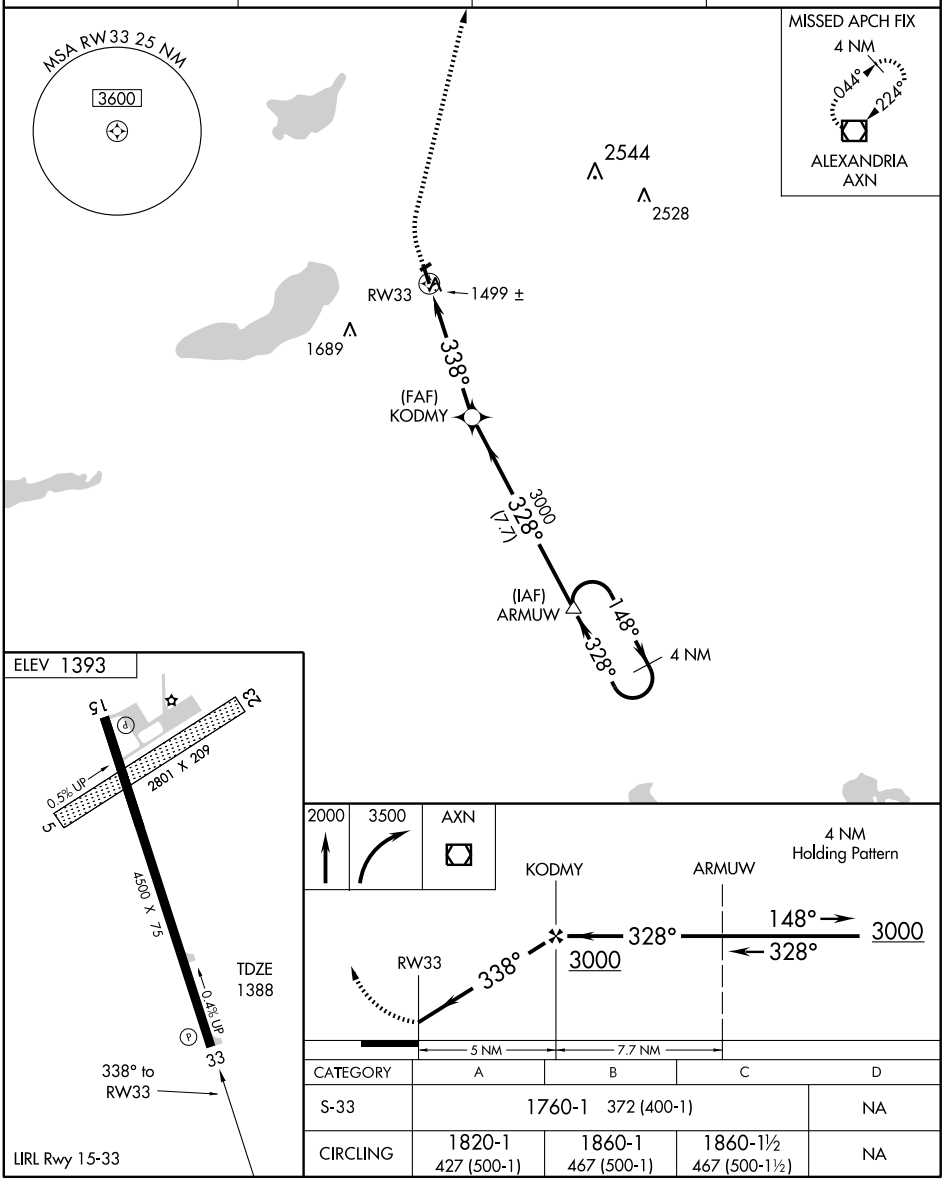
GLENWOOD MUNI (GHW)

APP CRS	Rwy Idg	4500
338°	TDZE	1388
	Apt Elev	1393

NA

MISSED APPROACH: Climb to 2000, then climbing right turn to 3500 direct AXN VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
346	126.1 269.2	121.725	122.9



CATEGORY	A	B	C	D
S-33	1760-1 372 (400-1)			NA
CIRCLING	1820-1 427 (500-1)	1860-1 467 (500-1)	1860-1½ 467 (500-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME AXN	APP CRS	Rwy Idg	4500
112.8	003°	TDZE	1388
Chan 75		Apt Elev	1393

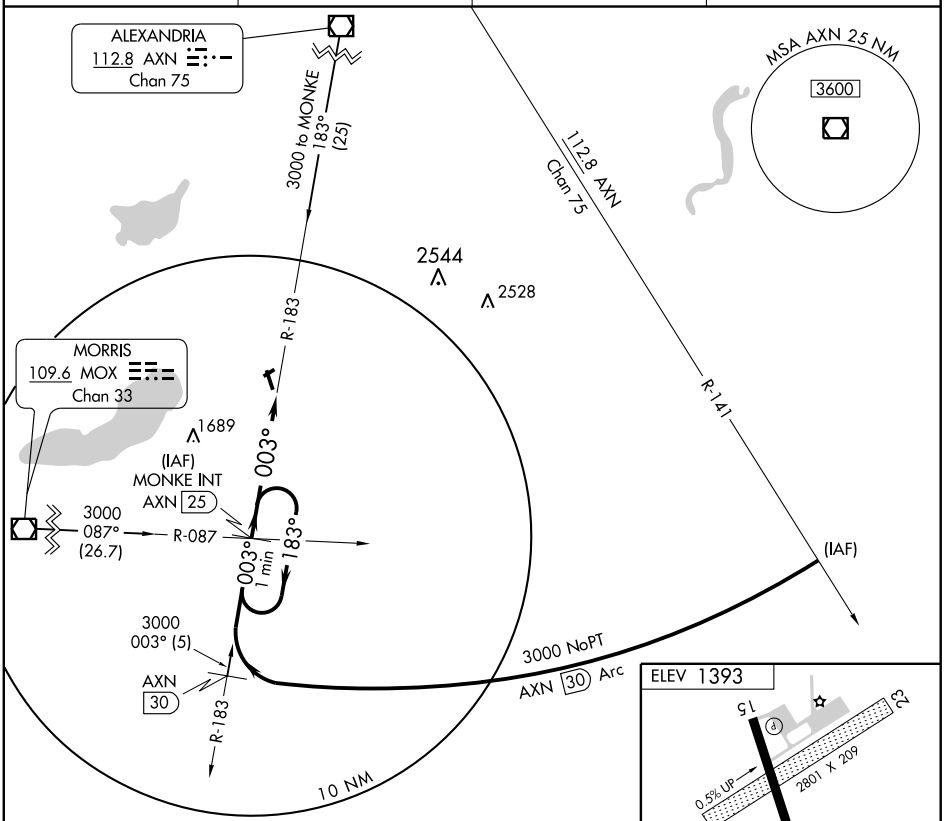
VOR RWY 33

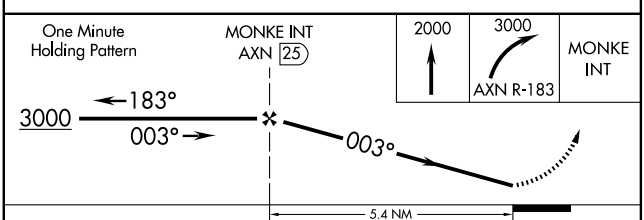
GLENWOOD MUNI (GHW)

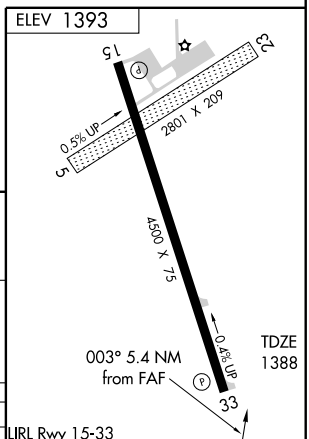
NA

MISSED APPROACH: Climb to 2000, then climbing right turn to 3000 via AXN R-183 to MONKE Int/25 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
346	126.1 269.2	121.725	122.9







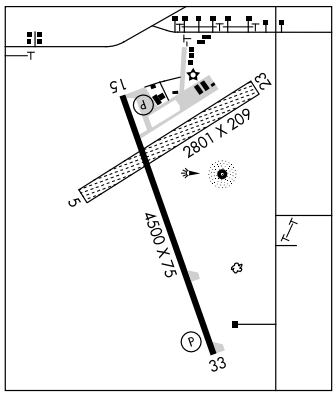
CATEGORY	A	B	C	D
S-33	1880-1	492 (500-1)	1880-1¼ 492 (500-1¼)	NA
CIRCLING	1880-1	487 (500-1)	1880-1½ 487 (500-1½)	NA

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

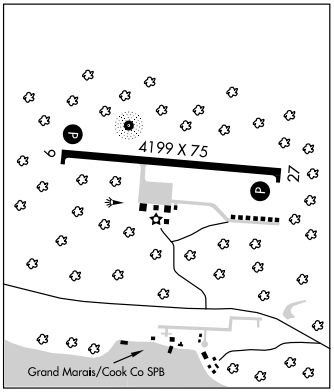
GLENWOOD MUNI (GHW) 3 E UTC−6(−5DT) N45°38.63′ W95°19.23′ — TWIN CITIES
1393 B **FUEL** 100LL NOTAM FILE GHW — L–14H
RWY 15–33: H4500X75 (ASPH) LIRL 0.4% up NW — IAP
RWY 15: PAPI(P4L). GA 3.0° TCH 33′.
RWY 33: PAPI(P4L). GA 3.0° TCH 25′.
RWY 05–23: 2801X209 (TURF) 0.5% up NE
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. For fuel call 320–634–4772. Deer on and invof arpt. Rwy 05–23 CLOSED winter months. Rwy 05–23 marked with 'A' frames.
WEATHER DATA SOURCES: AWOS–3 346 GHW (320) 634–5660.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 126.1
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE AXN.
ALEXANDRIA (L) VORW/DME 112.8 AXN Chan 75 N45°57.50′ W95°13.96′ 184° 19.2 NM to fld. 1367/7E. **HIWAS.**
NDB (MHW) 346 GHW N45°38.66′ W95°19.11′ at fld. **AWOS–3**. NOTAM FILE GHW. VFR only.



GOPHER N45°08.74′ W93°22.39′ NOTAM FILE PNM. — TWIN CITIES
(H) VORTACW 117.3 GEP Chan 120 165° 5.1 NM to Crystal. 877/6E. **HIWAS.** — H–2I, L–12J, 14I, A

GRAND MARAIS

GRAND MARAIS/COOK CO (CKC) 7 NW UTC−6(−5DT) N47°50.30′ W90°22.98′ — GREEN BAY
1799 B S4 **FUEL** 100LL, JET A LRA NOTAM FILE CKC — L–14I
RWY 09–27: H4199X75 (ASPH) MIRL — IAP
RWY 09: REIL. PAPI(P4L). Trees.
RWY 27: REIL. PAPI(P4L). Trees.
AIRPORT REMARKS: Attended 1400–2300Z‡. For svc after hrs call 218–387–3024. ACTIVATE MIRL Rwy 09–27, PAPI Rwy 09 and Rwy 27 and REIL Rwy 09 and Rwy 27—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.925 (218) 387–1971.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.3 (PRINCETON RADIO)
RADIO AIDS TO NAVIGATION: NOTAM FILE IWD.
IRONWOOD (L) VORTACW 108.8 IWD Chan 25 N46°31.94′ W90°07.55′ 351° 79.1 NM to fld. 1230/1E. **HIWAS.**
COOK COUNTY NDB (MHW) 358 CKC N47°50.40′ W90°23.14′ at fld. NOTAM FILE CKC.



GRAND MARAIS/COOK CO SPB (ØG5) 6 NW UTC−6(−5DT) N47°49.37′ W90°24.44′ — GREEN BAY
1635 S4 **FUEL** 100LL, JET A LRA NOTAM FILE PNM
WATERWAY 09–27: 15000X1500 (WATER)
WATERWAY 03–21: 3000X2000 (WATER)
SEAPLANE REMARKS: Attended 1400–2300Z‡. For fuel ctc arpt on 122.8 or call 218–387–2012. Customs avbl May 15–Oct 15 or by prior arrangement, call 218–475–2244.
COMMUNICATIONS: CTAF/UNICOM 122.8
GRAND MARAIS RCO 122.3 (PRINCETON RADIO)

NDB CKC	APP CRS		
358	285°	Rwy Idg	4199
		TDZE	1797
		Apt Elev	1799

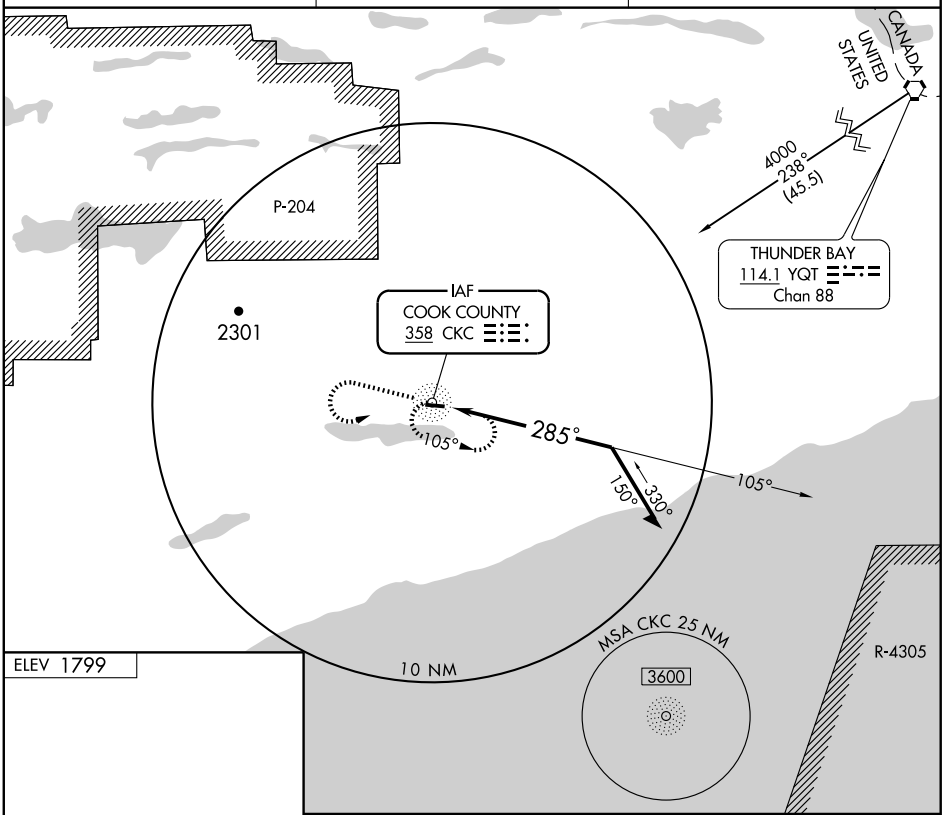
NDB RWY 27

GRAND MARAIS/COOK COUNTY (CKC)

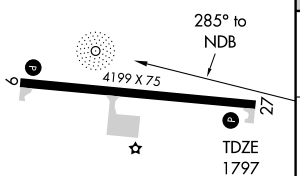
NA

MISSED APPROACH: Climb to 3000, then climbing left turn to 3500 direct CKC NDB and hold.

AWOS-3	PRINCETON RADIO	UNICOM
119.925	122.3	122.8 (CTAF) L

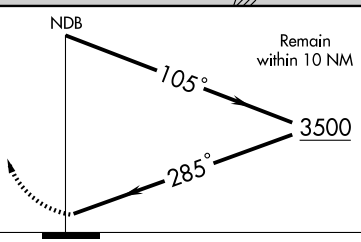


ELEV 1799



MIRL Rwy 9-27 L
REIL Rwys 9 and 27 L

3000	3500	CKC
		358



CATEGORY	A	B	C	D
S-27	2340-1	543 (600-1)	2340-1½ 543 (600-1½)	NA
CIRCLING	2340-1	541 (600-1)	2340-1½ 541 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 27

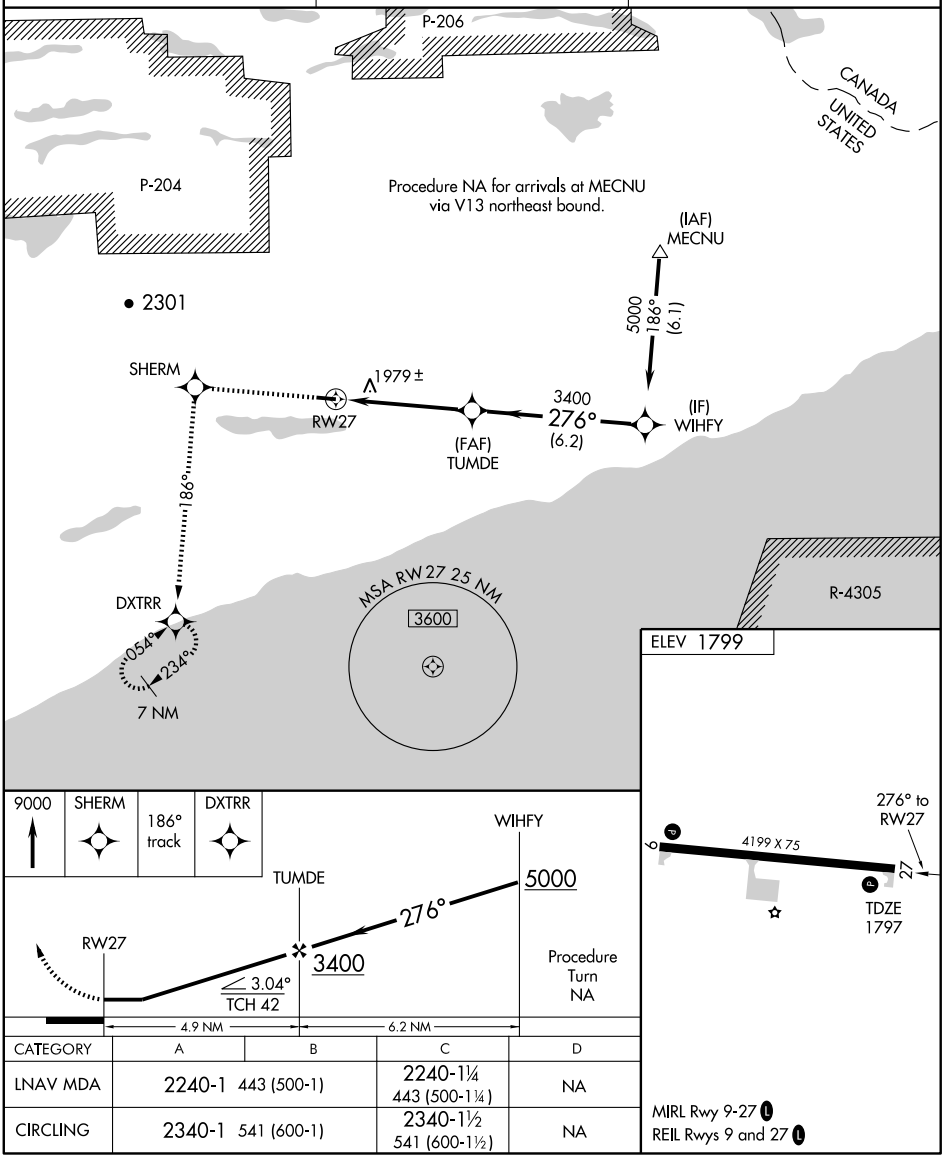
GRAND MARAIS/COOK COUNTY (CKC)

APP CRS	Rwy Idg	4199
276°	TDZE	1797
	Apt Elev	1799

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Ely altimeter setting and increase all MDA 200 feet, increase LNAV Cat C visibility ½ mile, circling Cat B visibility ¼ mile, and circling Cat C visibility ¾ mile.

MISSED APPROACH: Climb to 9000 direct SHERM and via 186° track to DXTRR and hold, continue climb-in-hold to 9000.

AWOS-3	PRINCETON RADIO	UNICOM
119.925	122.3	122.8 (CTAF) L

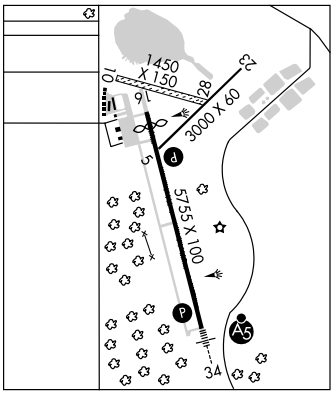


CATEGORY	A	B	C	D
LNAV MDA	2240-1 443 (500-1)		2240-1¼ 443 (500-1¼)	NA
CIRCLING	2340-1 541 (600-1)		2340-1½ 541 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

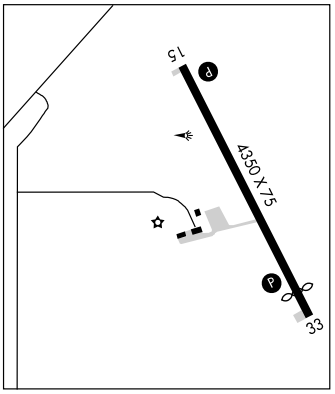
GRAND RAPIDS/ITASCA CO GORDON NEWSTROM FLD (GPZ) 2 SE UTC−6(−5DT) **TWIN CITIES**
N47°12.56′ W93°30.60′ **H–2J, L–14H**
1355 B S4 **FUEL** 100LL, JET A OX 2 Class IV, ARFF Index A NOTAM FILE GPZ **IAP**

RWY 16–34: H5755X100 (ASPH–PFC) S–23, D–38, 2D–78
HIRL 1.0% up SE
RWY 16: REIL. PAPI(P4L)—GA 3.0° TCH 47′. Thld dsplcd 423′. Tree.
RWY 34: MALSR. PAPI(P4L)—GA 3.0° TCH 49′. Tree.
RWY 05–23: 3000X60 (ASPH) S–12.5 MIRL
RWY 05: REIL. Trees. **RWY 23:** REIL. Trees.
RWY 10–28: 1450X150 (TURF)
RWY 10: Trees. **RWY 28:** Trees.
AIRPORT REMARKS: Attended dalgt hrs. Rwy 05–23 and Rwy 10–28 CLOSED to wheel acft during winter months. Deer and birds on and invof arpt. Seaplane ops on Lily Lake adjacent north of arpt. PPR for landing on Lily Lake, call 218–326–1226. Rwy 34 is the designated no wind rwy. Rwy 16–34 has a 582′ paved area north end of rwy. Rwy 05–23 and Rwy 10–28 marked with thld and boundary markers. ACTIVATE MALSR Rwy 34, REIL Rwy 05, Rwy 23 and Rwy 16, HIRL Rwy 16–34, MIRL Rwy 05–23, PAPI Rwy 16 and Rwy 34–CTAF.
WEATHER DATA SOURCES: AWOS–3 118.425 GPZ (218) 326–8337.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.05 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.9
AIRSPACE: CLASS E svc Mon–Sat 1100–0300Z‡, Sun 1400–0300Z‡ other times CLASS G.
RADIO AIDS TO NAVIGATION: NOTAM FILE GPZ.
(L) VORW/DME 111.4 GPZ Chan 51 N47°09.82′ W93°29.31′ 336° 2.9 NM to fld. 1400/6E.
VOR portion unusable 120°–192° byd 12 NM blo 5000′.
DME portion unusable 140°–215° byd 20 NM blo 3000′.
215°–045° byd 20 NM blo 3500′.
GALEX NDB (LOM) 272 GP N47°07.82′ W93°28.88′ 344° 4.9 NM to fld.
ILS 110.1 I–GPZ Rwy 34. Class IT. LOM GALEX NDB.



GRANITE FALLS MUNI/LENZEN–ROE MEM FLD (GDB) 4 S UTC−6(−5DT) **TWIN CITIES**
N44°45.20′ W95°33.36′ **L–12I, 14H**
1047 B **FUEL** 100LL NOTAM FILE GDB **IAP**

RWY 15–33: H4350X75 (ASPH) MIRL
RWY 15: REIL. PAPI(P4L)—GA 3.0° Trees.
RWY 33: REIL. PAPI(P4L)—GA 3.0° Thld dsplcd 650′. Road.
AIRPORT REMARKS: Unattended. Self service fuel avbl 24hrs with credit card. Deer on and invof arpt. Noise sensitive area 1.5 miles in radius off north end of Rwy 15–33. MIRL Rwy 15–33 preset on low ints dusk to dawn, to increase ints and ACTIVATE REIL Rwy 15 and Rwy 33, PAPI Rwy 15 and Rwy 33—CTAF. NOTE: See Special Notices—Aerobatic Practice Areas.
WEATHER DATA SOURCES: AWOS–3 120.1 (320) 564–9388.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.1
RADIO AIDS TO NAVIGATION: NOTAM FILE MVE.
MONTEVIDEO (T)VORW/DME 111.6 MVE Chan 53 N44°58.36′ W95°42.72′ 148° 14.8 NM to fld.
1034/5E. Unmonitored.



GRYGLA MUNI–MEL WILKENS FLD (3G2) 1 SW UTC−6(−5DT) N48°17.65′ W95°37.56′ **TWIN CITIES**
1177 NOTAM FILE PNM
RWY 17–35: 3437X92 (TURF) LIRL
AIRPORT REMARKS: Unattended. Deer on and invof arpt. Ultralight tfc on and invof arpt. Rwy 17–35 marked with yellow cones.
COMMUNICATIONS: CTAF 122.9

AL-5258 (FAA)

LOC I-GPZ	APP CRS	Rwy Idg	5755
110.1	344°	TDZE	1355
		Apt Elev	1355

ILS RWY 34

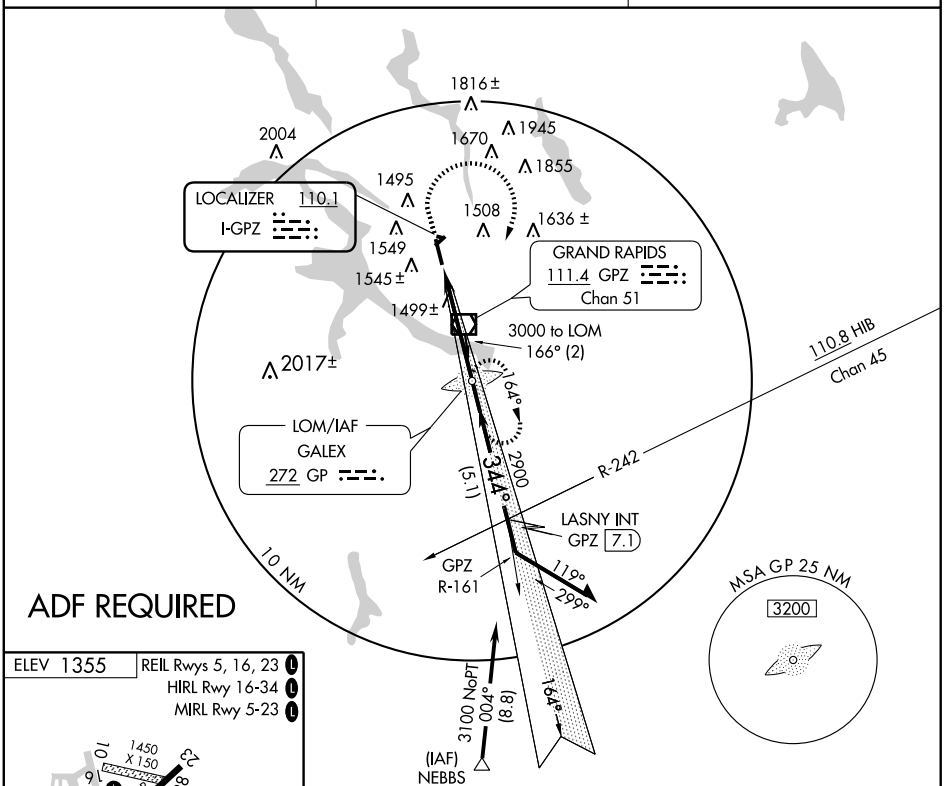
GRAND RAPIDS/ ITASCA COUNTY-GORDON NEWSTROM FIELD (GPZ)

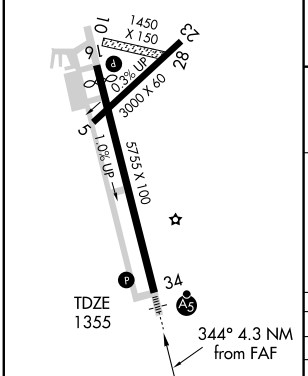
T NA — Circling not authorized at night to Rwys 10-28 and 5-23.

MALSR

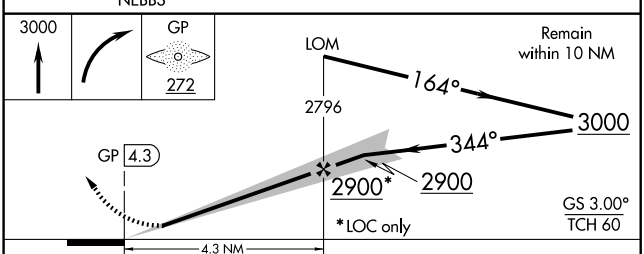
MISSED APPROACH: Climb to 3000, then right turn direct GALEX LOM and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.425	127.9 281.45	122.8 (CTAF) L





FAF to MAP 4.3 NM					
Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26



CATEGORY	A	B	C	D
S-ILS 34	1555-½ 200 (200-½)			
S-LOC 34	1760-½ 405 (500-½)		1760-¾ 405 (500-¾)	1760-1 405 (500-1)
CIRCLING	1860-1 505 (600-1)	1900-1 545 (600-1)	1900-1½ 545 (600-1½)	1920-2 565 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	5332
164°	TDZE	1332
	Apt Elev	1355

RNAV (GPS) RWY 16

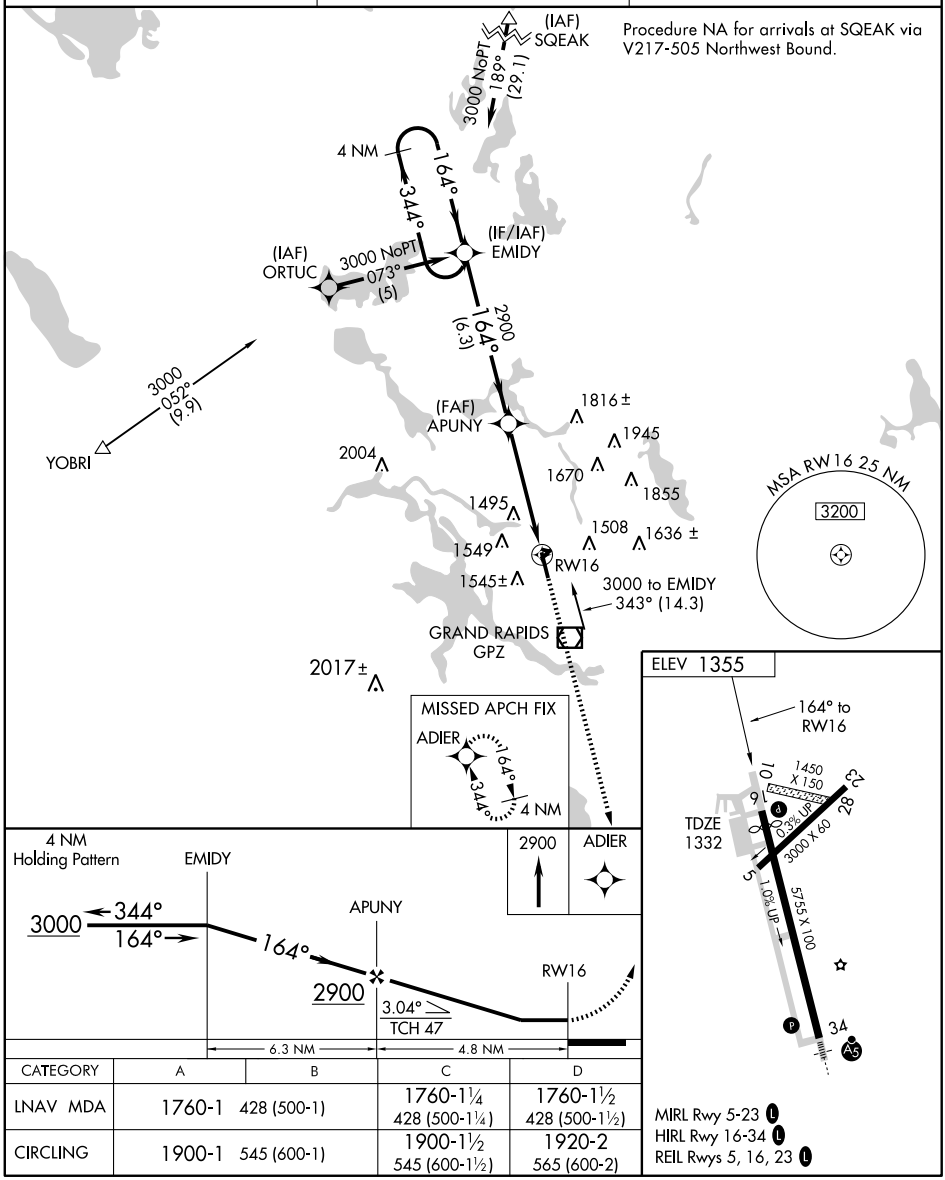
GRAND RAPIDS/ITASCA COUNTY-GORDON NEWSTROM FIELD (GPZ)

T A Circling to Rwy 10-28 and 5-23 NA at night. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Hibbings altimeter setting and increase all MDA 80 feet and increase LNAV and Circling Cat. C visibility ¼ mile.

MISSED APPROACH: Climb to 2900 direct ADIER and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.425	127.9 281.45	122.8 (CTAF) L

Procedure NA for arrivals at SQEAK via V217-505 Northwest Bound.



CATEGORY	A	B	C	D
LNAV MDA	1760-1	428 (500-1)	1760-1¼ 428 (500-1¼)	1760-1½ 428 (500-1½)
CIRCLING	1900-1	545 (600-1)	1900-1½ 545 (600-1½)	1920-2 565 (600-2)

MIRL Rwy 5-23 L
HIRL Rwy 16-34 L
REIL Rwys 5, 16, 23 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	5755
CH 86412	344°	TDZE	1355
W34A		Apt Elev	1355

GRAND RAPIDS/ ITASCA COUNTY-GORDON NEWSTROM FIELD (GPZ)

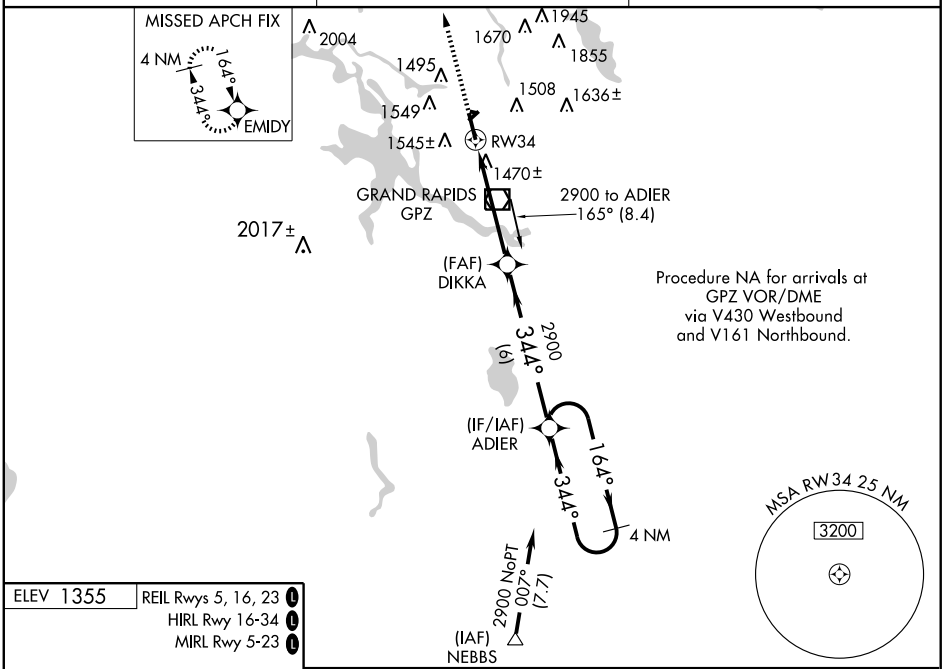
RNAV (GPS) RWY 34

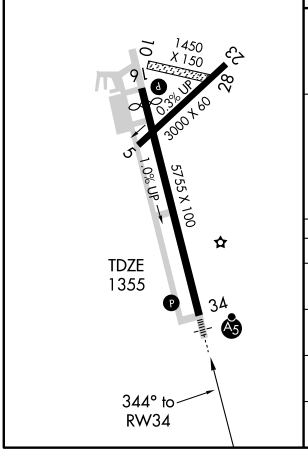
Circling to Rwy 10-28 and 5-23 NA at night. For inoperative MALSR when using KHIB altimeter setting, increase LPV all Cats visibility to 1 mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Baro-VNAV and VDP NA when using Hibbings altimeter setting. When local altimeter setting not received, use Hibbing altimeter setting and increase all DA 68 feet and all MDA 80 feet, increase LNAV/VNAV all Cats, LNAV Cat D visibility ¼ mile and Circling Cat C visibility ¼ mile.

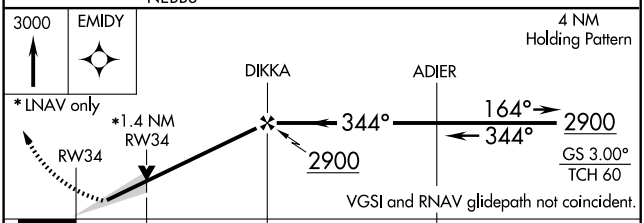
MALSR

MISSED APPROACH: Climb to 3000 direct EMIDY and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.425	127.9 281.45	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1555-½ 200 (200-½)			
LNAV/VNAV DA	1927-1½ 572 (600-1½)			
LNAV MDA	1860-½ 505 (600-½)		1860-1 505 (600-1)	
CIRCLING	1900-1 545 (600-1)		1900-1½ 545 (600-1½)	1920-2 565 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME GPZ	APP CRS	Rwy Idg	5755
111.4	334°	TDZE	1355
Chan 51		Apt Elev	1355

VOR RWY 34

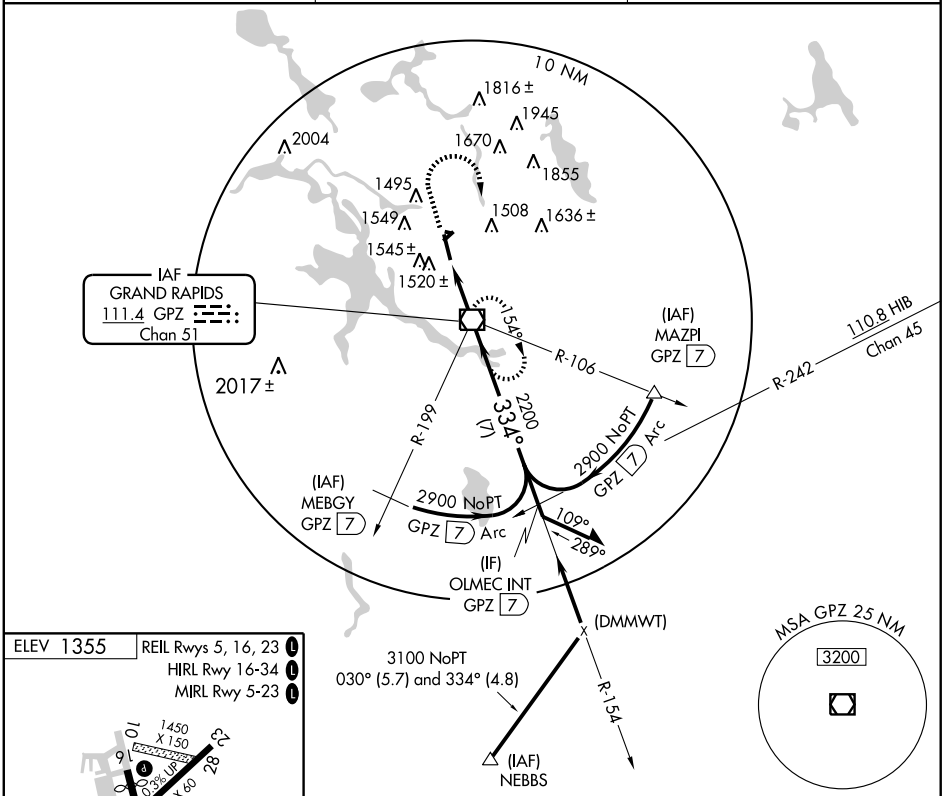
GRAND RAPIDS/ ITASCA COUNTY-GORDON NEWSTROM FIELD (GPZ)

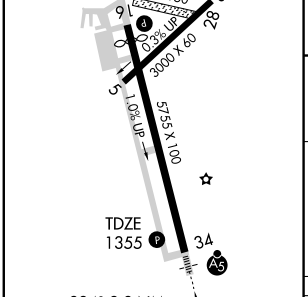
Circling to Rwy 10-28 and 5-23 NA at night. When local altimeter setting not received, use Hibbings altimeter setting and increase all MDA 80 feet, increase S-34 Cat. C and D and Circling Cat C visibility ¼ mile. VDP NA when using Hibbings altimeter setting.

MALSR

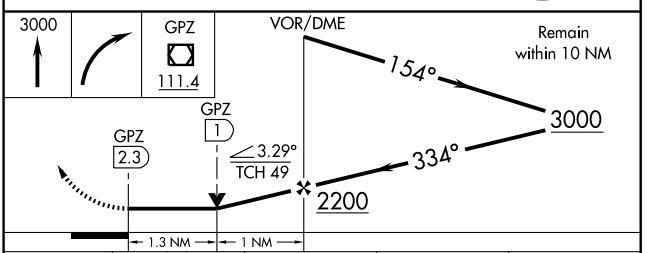
MISSED APPROACH: Climb to 3000 then right turn direct GPZ VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
118.425	127.9 281.45	122.8 (CTAF) L





FAF to MAP 2.3 NM					
Knots	60	90	120	150	180
Min:Sec	2:18	1:32	1:09	0:55	0:46

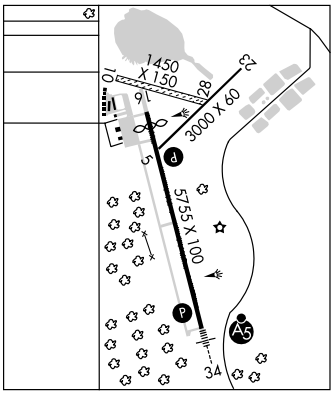


CATEGORY	A	B	C	D
S-34	1800-½ 445 (500-½)		1800-¾ 445 (500-¾)	1800-1 445 (500-1)
CIRCLING	1900-1 545 (600-1)		1900-1½ 545 (600-1½)	1920-2 565 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

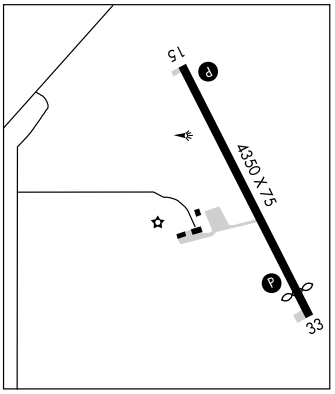
GRAND RAPIDS/ITASCA CO GORDON NEWSTROM FLD (GPZ) 2 SE UTC−6(−5DT) **TWIN CITIES**
N47°12.56′ W93°30.60′ **H–2J, L–14H**
1355 B S4 **FUEL** 100LL, JET A OX 2 Class IV, ARFF Index A NOTAM FILE GPZ **IAP**

RWY 16–34: H5755X100 (ASPH–PFC) S–23, D–38, 2D–78
HIRL 1.0% up SE
RWY 16: REIL. PAPI(P4L)—GA 3.0° TCH 47′. Thld dsplcd 423′. Tree.
RWY 34: MALSR. PAPI(P4L)—GA 3.0° TCH 49′. Tree.
RWY 05–23: 3000X60 (ASPH) S–12.5 MIRL
RWY 05: REIL. Trees. **RWY 23:** REIL. Trees.
RWY 10–28: 1450X150 (TURF)
RWY 10: Trees. **RWY 28:** Trees.
AIRPORT REMARKS: Attended dalgt hrs. Rwy 05–23 and Rwy 10–28 CLOSED to wheel acft during winter months. Deer and birds on and invof arpt. Seaplane ops on Lily Lake adjacent north of arpt. PPR for landing on Lily Lake, call 218–326–1226. Rwy 34 is the designated no wind rwy. Rwy 16–34 has a 582′ paved area north end of rwy. Rwy 05–23 and Rwy 10–28 marked with thld and boundary markers. ACTIVATE MALSR Rwy 34, REIL Rwy 05, Rwy 23 and Rwy 16, HIRL Rwy 16–34, MIRL Rwy 05–23, PAPI Rwy 16 and Rwy 34–CTAF.
WEATHER DATA SOURCES: AWOS–3 118.425 GPZ (218) 326–8337.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.05 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.9
AIRSPACE: CLASS E svc Mon–Sat 1100–0300Z‡, Sun 1400–0300Z‡ other times CLASS G.
RADIO AIDS TO NAVIGATION: NOTAM FILE GPZ.
(L) VORW/DME 111.4 GPZ Chan 51 N47°09.82′ W93°29.31′ 336° 2.9 NM to fld. 1400/6E.
VOR portion unusable 120°–192° byd 12 NM blo 5000′.
DME portion unusable 140°–215° byd 20 NM blo 3000′.
215°–045° byd 20 NM blo 3500′.
GALEX NDB (LOM) 272 GP N47°07.82′ W93°28.88′ 344° 4.9 NM to fld.
ILS 110.1 I–GPZ Rwy 34. Class IT. LOM GALEX NDB.



GRANITE FALLS MUNI/LENZEN–ROE MEM FLD (GDB) 4 S UTC−6(−5DT) **TWIN CITIES**
N44°45.20′ W95°33.36′ **L–12I, 14H**
1047 B **FUEL** 100LL NOTAM FILE GDB **IAP**

RWY 15–33: H4350X75 (ASPH) MIRL
RWY 15: REIL. PAPI(P4L)—GA 3.0° Trees.
RWY 33: REIL. PAPI(P4L)—GA 3.0° Thld dsplcd 650′. Road.
AIRPORT REMARKS: Unattended. Self service fuel avbl 24hrs with credit card. Deer on and invof arpt. Noise sensitive area 1.5 miles in radius off north end of Rwy 15–33. MIRL Rwy 15–33 preset on low ints dusk to dawn, to increase ints and ACTIVATE REIL Rwy 15 and Rwy 33, PAPI Rwy 15 and Rwy 33—CTAF. NOTE: See Special Notices—Aerobatic Practice Areas.
WEATHER DATA SOURCES: AWOS–3 120.1 (320) 564–9388.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.1
RADIO AIDS TO NAVIGATION: NOTAM FILE MVE.
MONTEVIDEO (T)VORW/DME 111.6 MVE Chan 53 N44°58.36′ W95°42.72′ 148° 14.8 NM to fld.
1034/5E. Unmonitored.



GRYGLA MUNI–MEL WILKENS FLD (3G2) 1 SW UTC−6(−5DT) N48°17.65′ W95°37.56′ **TWIN CITIES**
1177 NOTAM FILE PNM
RWY 17–35: 3437X92 (TURF) LIRL
AIRPORT REMARKS: Unattended. Deer on and invof arpt. Ultralight tfc on and invof arpt. Rwy 17–35 marked with yellow cones.
COMMUNICATIONS: CTAF 122.9

RNAV (GPS) RWY 33

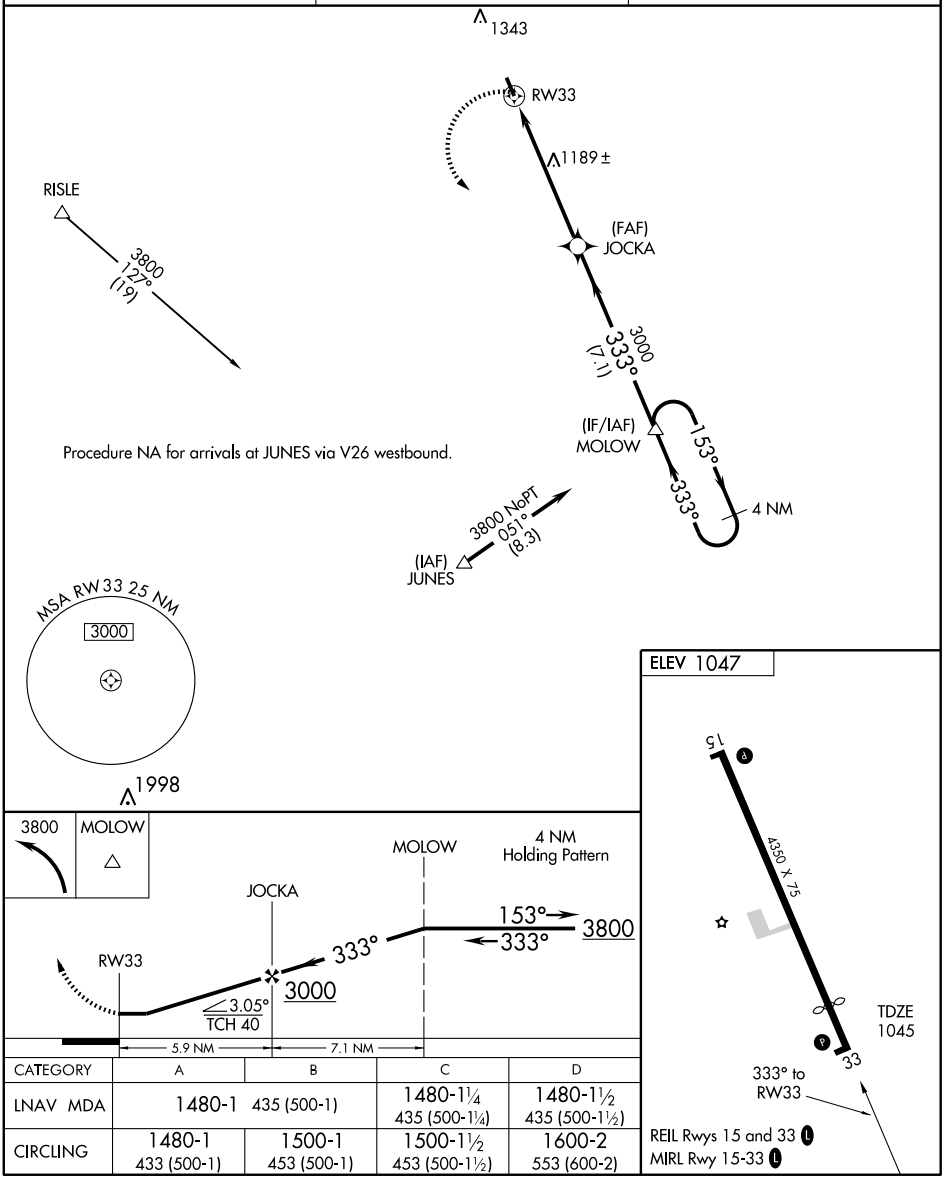
GRANITE FALLS MUNI/ LENZEN-ROE MEMORIAL FIELD (GDB)

APP CRS	Rwy Idg	3700
333°	TDZE	1045
	Apt Elev	1047

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Montevideo altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climbing left turn to 3800 direct MOLOW and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
120.1	127.1 290.2	122.8 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	1480-1 435 (500-1)		1480-1¼ 435 (500-1¼)	1480-1½ 435 (500-1½)
CIRCLING	1480-1 433 (500-1)	1500-1 453 (500-1)	1500-1½ 453 (500-1½)	1600-2 553 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME MVE	APP CRS	Rwy Idg	3700
111.6	328°	TDZE	1045
Chan 53		Apt Elev	1047

VOR/DME RWY 33

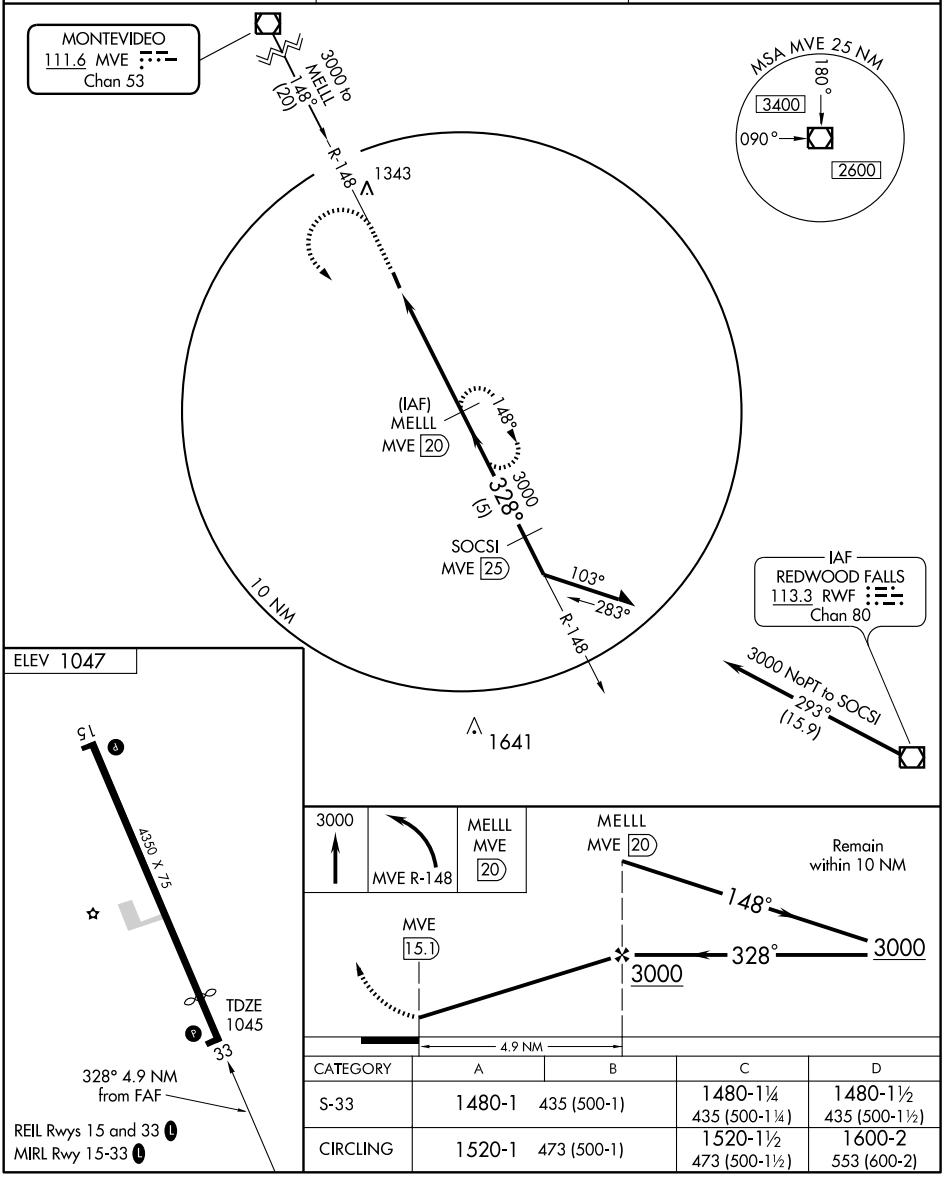
GRANITE FALLS MUNI/LENZEN-ROE MEMORIAL FIELD (GDB)

NA

When local altimeter setting not received, use Montevideo altimeter setting.

MISSED APPROACH: Climb to 3000, then left turn via R-148 to MELLL/MVE 20 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
120.1	127.1 290.2	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-33	1480-1	435 (500-1)	1480-1¼ 435 (500-1¼)	1480-1½ 435 (500-1½)
CIRCLING	1520-1	473 (500-1)	1520-1½ 473 (500-1½)	1600-2 553 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

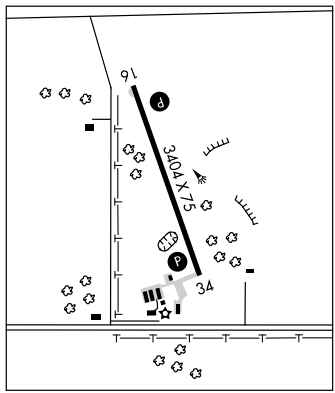
HALFWAY N44°12.27′ W93°22.23′ NOTAM FILE PNM — OMAHA
(T) VORW/DME 111.2 FOW Chan 49 134° 6.8 NM to Owatonna Degner Rgnl. — L–12J
1098/2E. **AWOS–3.** Unmonitored.
VOR portion unusable 230°–250°.

HALLOCK MUNI (HCO) 1 S UTC−6(−5DT) N48°45.16′ W96°56.58′ — TWIN CITIES
819 B **FUEL** 100LL NOTAM FILE HCO — L–14G
RWY 13–31: H4007X75 (ASPH) S–30, D–36, 2D–65 MIRL — IAP
RWY 13: REIL. VASI(V2L)—GA 3.0° TCH 31′. **RWY 31:** REIL. VASI(V2L)—GA 3.0° TCH 30′.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Fuel avbl 24 hrs with credit card. Ultralight tfc on and invof arpt. ACTIVATE MIRL Rwy 13–31 and REIL Rwys 13 and 31—CTAF.
WEATHER DATA SOURCES: AWOS–3 126.475 (218) 843–2415.
COMMUNICATIONS: CTAF/UNICOM 122.8
MINNEAPOLIS APP/DEP CON 132.15
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
HUMBOLDT(H) VORTAC 112.4 HML Chan 71 N48°52.15′ W97°07.03′ 126° 9.8 NM to fld. 800/9E.

HAMRE N46°13.24′ W96°03.42′ NOTAM FILE FFM. — TWIN CITIES
NDB (LOM) 337 FF 308° 5.7 NM to Fergus Falls Muni-Einar Mickelson Fld.

HARVI N48°00.40′ W96°05.75′ NOTAM FILE TVF. — TWIN CITIES
NDB (LOM) 260 HY 310° 5.0 NM to Thief River Falls Rgnl. Unmonitored.

HAWLEY MUNI (Ø4Y) 2 W UTC−6(−5DT) N46°53.03′ W96°21.02′ — TWIN CITIES
1208 B **FUEL** 100LL NOTAM FILE PNM — L–14H
RWY 16–34: H3404X75 (ASPH) S–12.5 MIRL 0.3% up NW — IAP
RWY 16: PAPI(P2L).
RWY 34: PAPI(P2L). Trees.
AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Rwy 16 hold short line missing. PAPI Rwy 16 and Rwy 34 OTS indef. ACTIVATE MIRL Rwy 16–34 and PAPI Rwy 16 and Rwy 34—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **FARGO APP/DEP CON** 120.4 (1200–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.35 (0500–1200Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE FAR.
FARGO (H) VORTACW 116.2 FAR Chan 109 N46°45.20′ W96°51.08′ 060° 22.1 NM to fld. 910/9E. **HIWAS.**



HECTOR MUNI (1D6) 1 S UTC−6(−5DT) N44°43.86′ W94°42.88′ — TWIN CITIES
1077 **FUEL** 100LL NOTAM FILE PNM
RWY 12–30: H2776X50 (ASPH) S–13, D–18 RWY LGTS (NSTD)
RWY 12: Road.
RWY 05–23: 2580X165 (TURF)
RWY 05: Road.
AIRPORT REMARKS: Attended continuously. For svc call 320–848–2745. Ultralight tfc on and invof arpt. Water twr N. Rwy 05–23 marked with yellow cones. NSTD lgts mounted in yellow cones.
COMMUNICATIONS: CTAF/UNICOM 122.8

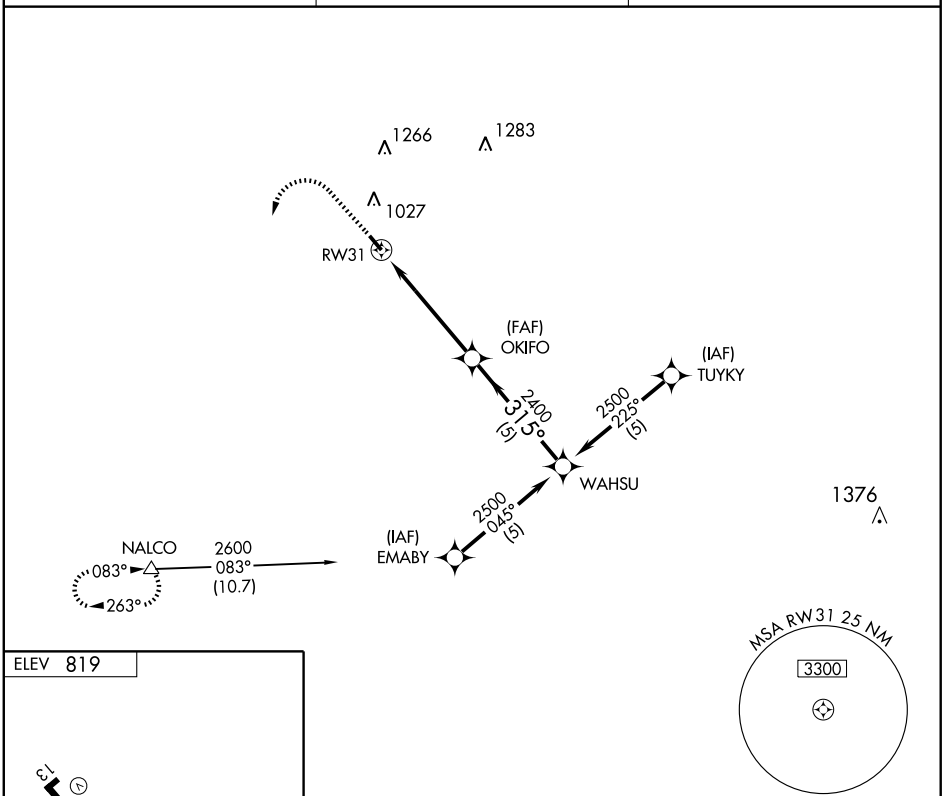
APP CRS	Rwy Idg	4007
315°	TDZE	819
	Apt Elev	819

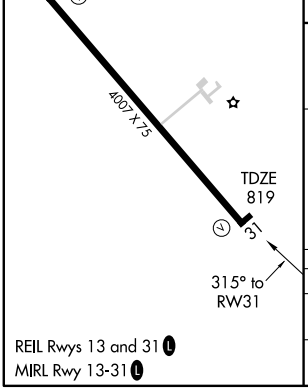
GPS RWY 31
HALLOCK MUNI (HCO)

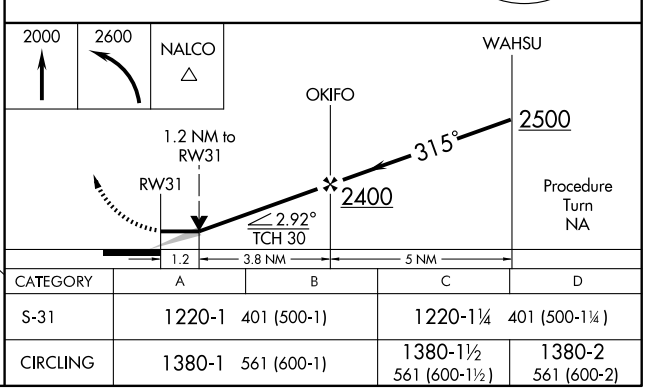
NA

MISSED APPROACH: Climb to 2000 then climbing left turn to 2600 direct NALCO WP and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
126.475	132.15 269.6	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-31	1220-1 401 (500-1)		1220-1¼ 401 (500-1¼)	
CIRCLING	1380-1 561 (600-1)		1380-1½ 561 (600-1½)	1380-2 561 (600-2)

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

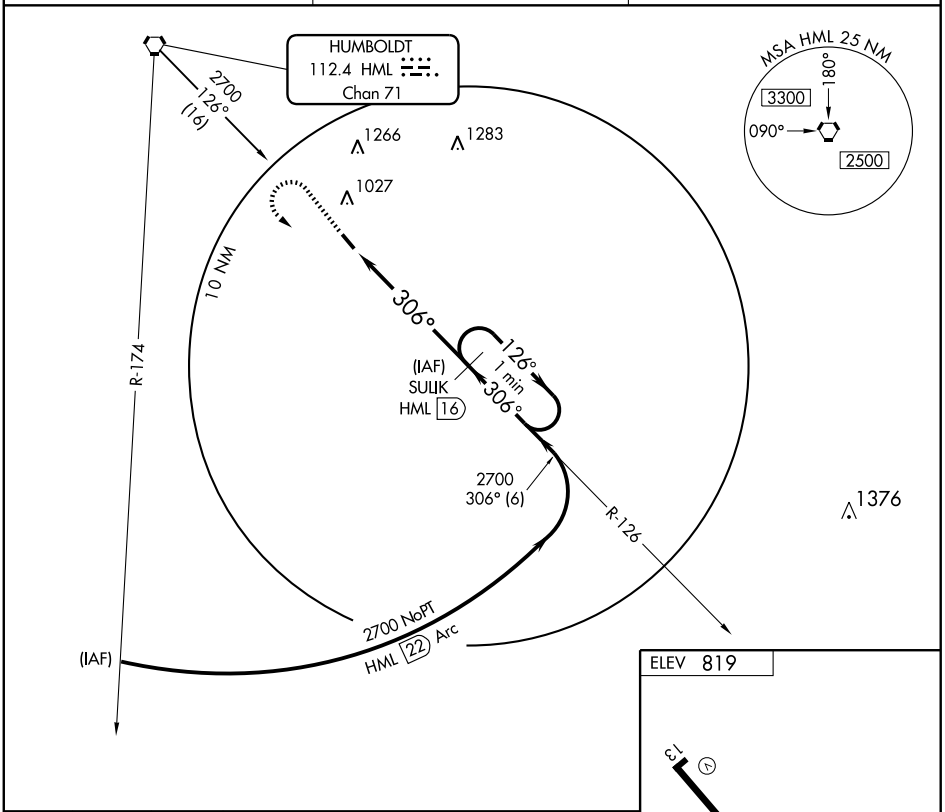
VORTAC HML 112.4 Chan 71	APP CRS 306°	Rwy Idg 4007 TDZE 819 Apt Elev 819

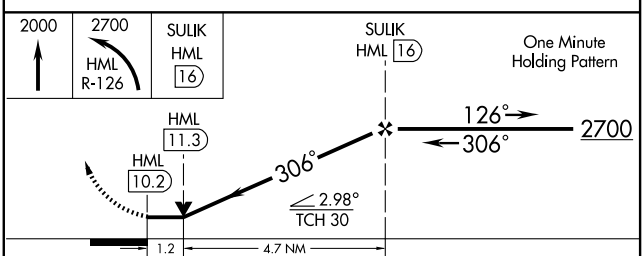
VOR/DME RWY 31
HALLOCK MUNI (HCO)

NA

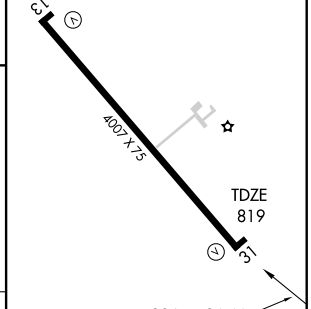
MISSED APPROACH: Climb to 2000 then climbing left turn to 2700 via HML R-126 to SULIK and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
126.475	132.15 269.6	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-31	1220-1 401 (500-1)		1220-1¼ 401 (500-1¼)	
CIRCLING	1380-1 561 (600-1)		1380-1½ 561 (600-1½)	1380-2 561 (600-2)



REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

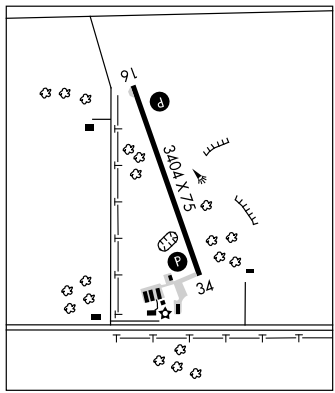
HALFWAY N44°12.27′ W93°22.23′ NOTAM FILE PNM — OMAHA
(T) VORW/DME 111.2 FOW Chan 49 134° 6.8 NM to Owatonna Degner Rgnl. — L–12J
1098/2E. **AWOS–3.** Unmonitored.
VOR portion unusable 230°–250°.

HALLOCK MUNI (HCO) 1 S UTC−6(−5DT) N48°45.16′ W96°56.58′ — TWIN CITIES
819 B **FUEL** 100LL NOTAM FILE HCO — L–14G
RWY 13–31: H4007X75 (ASPH) S–30, D–36, 2D–65 MIRL — IAP
RWY 13: REIL. VASI(V2L)—GA 3.0° TCH 31′. **RWY 31:** REIL. VASI(V2L)—GA 3.0° TCH 30′.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Fuel avbl 24 hrs with credit card. Ultralight tfc on and invof arpt. ACTIVATE MIRL Rwy 13–31 and REIL Rwys 13 and 31—CTAF.
WEATHER DATA SOURCES: AWOS–3 126.475 (218) 843–2415.
COMMUNICATIONS: CTAF/UNICOM 122.8
MINNEAPOLIS APP/DEP CON 132.15
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
HUMBOLDT(H) VORTAC 112.4 HML Chan 71 N48°52.15′ W97°07.03′ 126° 9.8 NM to fld. 800/9E.

HAMRE N46°13.24′ W96°03.42′ NOTAM FILE FFM. — TWIN CITIES
NDB (LOM) 337 FF 308° 5.7 NM to Fergus Falls Muni-Einar Mickelson Fld.

HARVI N48°00.40′ W96°05.75′ NOTAM FILE TVF. — TWIN CITIES
NDB (LOM) 260 HY 310° 5.0 NM to Thief River Falls Rgnl. Unmonitored.

HAWLEY MUNI (Ø4Y) 2 W UTC−6(−5DT) N46°53.03′ W96°21.02′ — TWIN CITIES
1208 B **FUEL** 100LL NOTAM FILE PNM — L–14H
RWY 16–34: H3404X75 (ASPH) S–12.5 MIRL 0.3% up NW — IAP
RWY 16: PAPI(P2L).
RWY 34: PAPI(P2L). Trees.
AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Rwy 16 hold short line missing. PAPI Rwy 16 and Rwy 34 OTS indef. ACTIVATE MIRL Rwy 16–34 and PAPI Rwy 16 and Rwy 34—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **FARGO APP/DEP CON** 120.4 (1200–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.35 (0500–1200Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE FAR.
FARGO (H) VORTACW 116.2 FAR Chan 109 N46°45.20′ W96°51.08′ 060° 22.1 NM to fld. 910/9E. **HIWAS.**



HECTOR MUNI (1D6) 1 S UTC−6(−5DT) N44°43.86′ W94°42.88′ — TWIN CITIES
1077 **FUEL** 100LL NOTAM FILE PNM
RWY 12–30: H2776X50 (ASPH) S–13, D–18 RWY LGTS (NSTD)
RWY 12: Road.
RWY 05–23: 2580X165 (TURF)
RWY 05: Road.
AIRPORT REMARKS: Attended continuously. For svc call 320–848–2745. Ultralight tfc on and invof arpt. Water twr N. Rwy 05–23 marked with yellow cones. NSTD lgts mounted in yellow cones.
COMMUNICATIONS: CTAF/UNICOM 122.8

RNAV (GPS) RWY 34

HAWLEY MUNI (Ø4Y)

APP CRS	Rwy Idg	3404
336°	TDZE	1205
	Apt Elev	1209

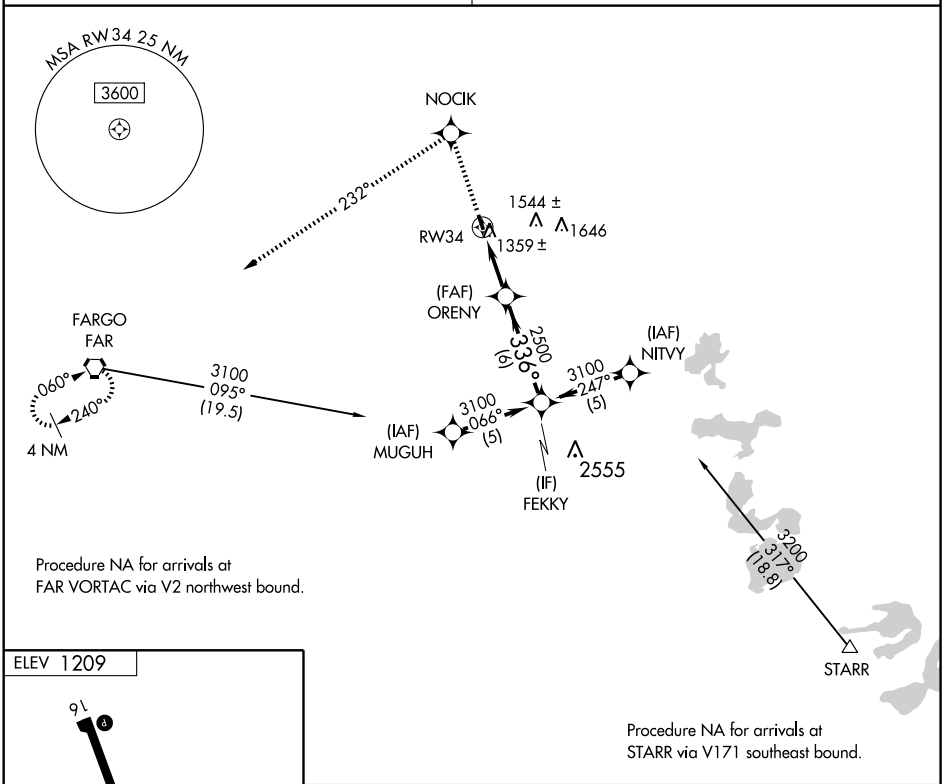
Use Fargo, ND altimeter setting.
DME/DME RNP-0.3 NA.

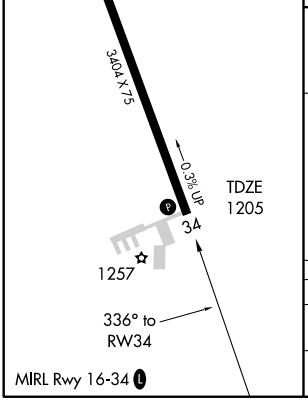
NA

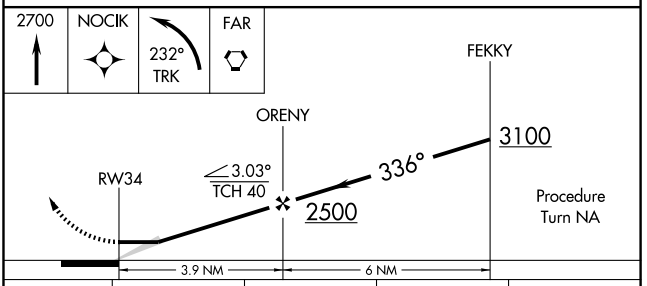
MISSED APPROACH: Climb to 2700 direct NOCIK and left turn via 232° track to FAR VORTAC and hold.

FARGO APP CON ★
120.4 377.15

UNICOM
122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1700-1	495 (500-1)	1700-1¼ 495 (500-1¼)	NA
CIRCLING	1760-1	551 (600-1)	1760-1½ 551 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VORTAC FAR 116.2 Chan 109	APP CRS 060°	Rwy Idg N/A TDZE N/A Apt Elev 1209

VOR/DME-A
HAWLEY MUNI (Ø4Y)

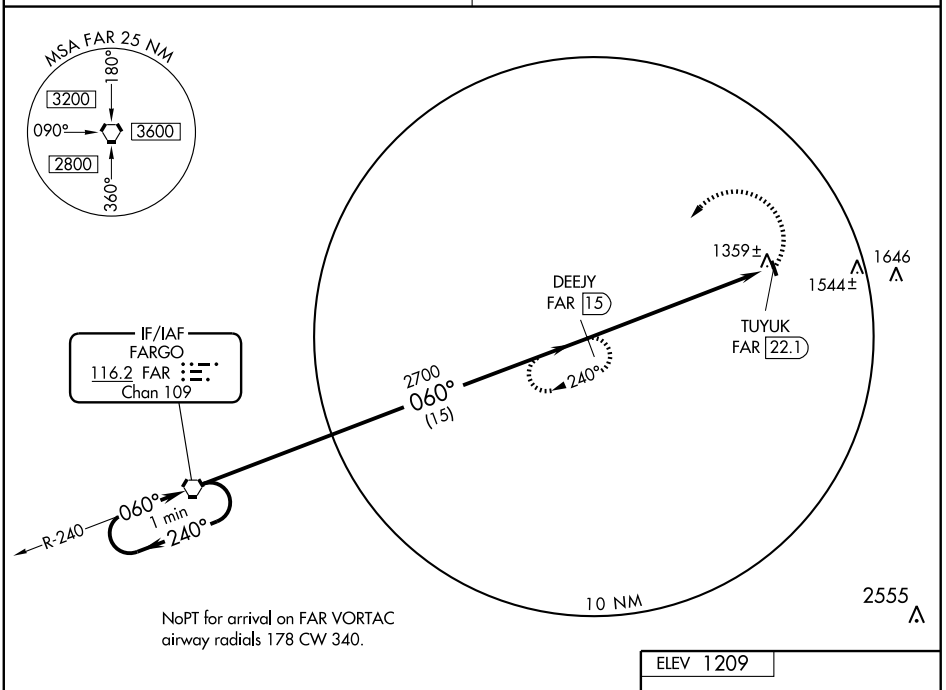
Use Fargo, ND altimeter setting.

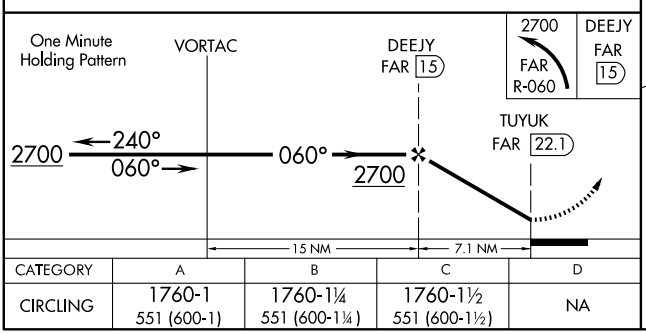
NA

MISSED APPROACH: Climbing left turn to 2700 via FAR R-060 to DEEJY/15 DME and hold.

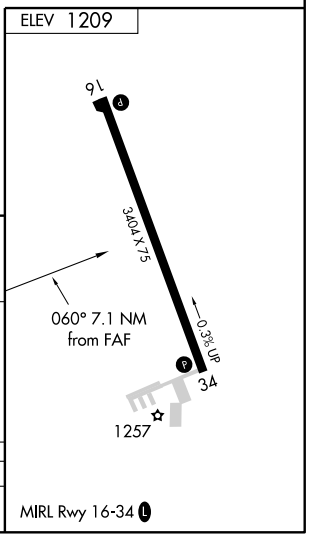
FARGO APP CON ★ 120.4 377.15

UNICOM 122.8 (CTAF) L





CATEGORY	A	B	C	D
CIRCLING	1760-1 551 (600-1)	1760-1¼ 551 (600-1¼)	1760-1½ 551 (600-1½)	NA



NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

HENNING MUNI (Ø5Y) 1 S UTC−6(−5DT) N46°18.23′ W95°26.37′ **TWIN CITIES**

1455 B **FUEL** 100LL TPA—2250(795) NOTAM FILE PNM

RWY 17–35: 3280X200 (TURF) LIRL (NSTD)

AIRPORT REMARKS: Unattended. Fuel avb 24 hrs with credit card. Ultralights on and invof arpt. Rwy 17–35 marked with yellow cones. Rwy 17–35 NSTD LIRL, spacing irregular.

COMMUNICATIONS: CTAF 122.9

HERMAN MUNI (Ø6Y) 2 NW UTC−6(−5DT) N45°49.80′ W96°09.64′ **TWIN CITIES**

1068 B **FUEL** 100LL TPA—1868(800) NOTAM FILE PNM

RWY 14–32: H2997X60 (ASPH) LIRL (NSTD)

AIRPORT REMARKS: Unattended. For fuel call 320–677–2746. Ultralights on and invof arpt. Rwy 14 and Rwy 32 NSTD LIRL.

COMMUNICATIONS: CTAF 122.9

HIBBING N47°18.09′ W92°42.24′ NOTAM FILE HIB **GREEN BAY**

(L) VORW/DME 110.8 HIB Chan 45 311° 7.5 NM to Range Rgnl. 1312/2E. **L–14I**

VOR portion unusable 113°–126°, DME unusable byd 33 NM blo 3,000′.

RCO 122.6 (PRINCETON RADIO)

HIBBING

RANGE RGNL (HIB) 4 SE UTC−6(−5DT) N47°23.20′ W92°50.34′ **GREEN BAY**

1354 B S4 **FUEL** 100LL, JET A Class I, ARFF Index A NOTAM FILE HIB **H–2J, L–14I**

RWY 13–31: H6760X150 (ASPH–GRVD) S–60, D–100, 2S–127, 2D–160 HIRL **IAP**

RWY 13: MALSR. VASI(V4L)—GA 3.0° TCH 45′. Road.

RWY 31: MALSR. VASI(V4L)—GA 2.9° TCH 57′. Trees.

RWY 04–22: H3096X75 (ASPH) S–35, D–45

RWY 04: Road.

RUNWAY DECLARED DISTANCE INFORMATION

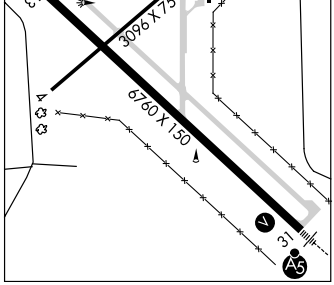
RWY 04: TORA–3075 TODA–3075 ASDA–3075 LDA–3075

RWY 13: TORA–6758 TODA–6758 ASDA–6758 LDA–6758

RWY 22: TORA–3075 TODA–3075 ASDA–3075 LDA–3075

RWY 31: TORA–6758 TODA–6758 ASDA–6758 LDA–6758

AIRPORT REMARKS: Attended 1100–0500Z‡. Airfield conditions unmonitored between 0500–1100Z‡. Rwy 04–22 CLOSED during the hrs of darkness. PPR for unscheduled air carrier ops with more than 30 passenger seats, call arpt manager 218–262–3451. Rwy 04–22 not avbl for air carrier ops with more than 9 passenger seats. HIRL Rwy 13–31 preset on low ints, to increase ints and ACTIVATE VASI Rwy 13 and Rwy 31, MALSR Rwy 13 and Rwy 31—CTAF.



WEATHER DATA SOURCES: ASOS 126.425 (218) 263–8384.

COMMUNICATIONS: CTAF/UNICOM 123.0

HIBBING RCO 122.6 (PRINCETON RADIO)

Ⓡ **DULUTH APP/DEP CON** 125.45 (1200–0500Z‡) **CLNC DEL** 127.4

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.9 (0500–1200Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE HIB.

HIBBING (L) VORW/DME 110.8 HIB Chan 45 N47°18.09′ W92°42.24′ 311° 7.5 NM to fld. 1312/2E.

ILS 109.5 I–HIB Rwy 31. Class IC.

ILS 110.5 I–JAE Rwy 13. Class IC. GS unusable for coupled approaches blo 2388′. GS unmonitored.

COMM/NAV/WEATHER REMARKS: Contact Duluth App Con to ACTIVATE Rwy 13 and Rwy 31 ILS 1200–0500Z‡.

HILL CITY–QUADNA MOUNTAIN (Ø7Y) 2 S UTC−6(−5DT) N46°57.35′ W93°35.85′ **TWIN CITIES**

1289 B NOTAM FILE PNM

RWY 16–34: 2850X150 (TURF)

RWY 16: Trees. Rgt tfc. **RWY 34:** Tree.

AIRPORT REMARKS: Unattended. Arpt CLOSED sunset–sunrise. Rwy 16–34 marked with yellow cones.

COMMUNICATIONS: CTAF 122.9

LOC I-JAE	APP CRS	Rwy Idg	6760
110.5	130°	TDZE	1353
		Apt Elev	1353

ILS or LOC/DME RWY 13

HIBBING/ RANGE RGNL (HIB)

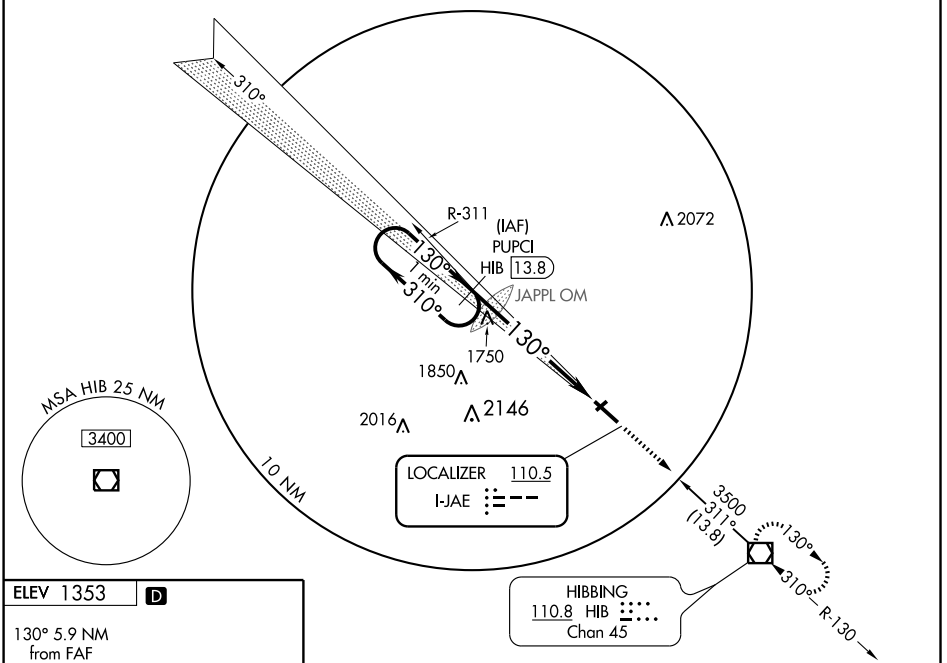
Autopilot couple approach NA below 2388.

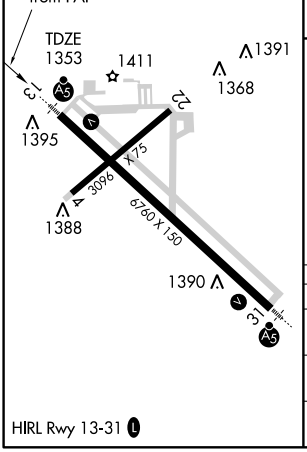
MALSR

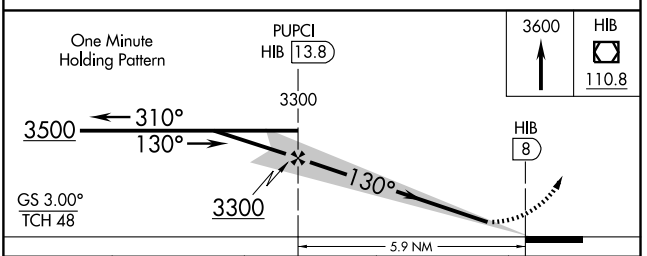
MISSED APPROACH: Climb to 3600 direct HIB VOR/DME and hold.

ASOS	DULUTH APP CON ★	CLNC DEL	UNICOM
126.425	125.45 255.9	127.4	123.0 (CTAF) L

DME REQUIRED







CATEGORY	A	B	C	D
S-ILS 13	1553-½ 200 (200-½)			
S-LOC 13	2060-½ 707 (800-½)		2060-1½ 707 (800-1½)	2060-1¾ 707 (800-1¾)
CIRCLING	2060-1 707 (800-1)		2060-1½ 707 (800-1½)	2060-2 707 (800-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC I-HIB	APP CRS	Rwy Idg	6760
109.5	310°	TDZE	1343
		Apt Elev	1353

ILS or LOC RWY 31

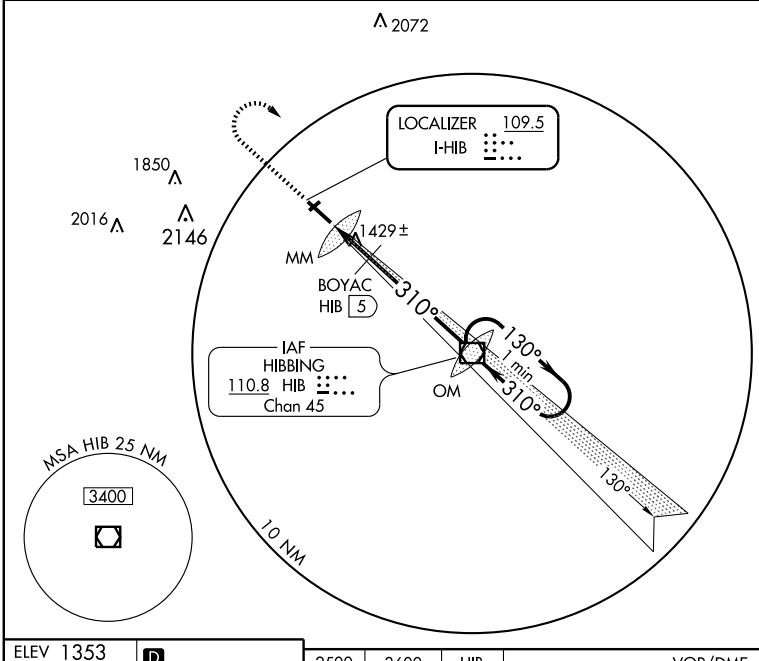
HIBBING/ RANGE RGNL (HIB)

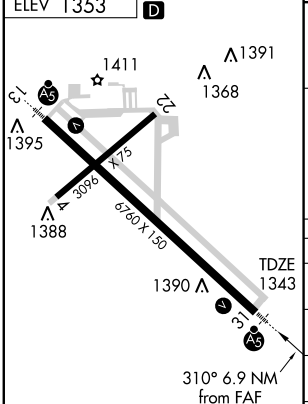
For inoperative MALSR, increase BOYAC FIX MINIMUMS S-LOC 31 Category D visibility to 1. #DME from HIB VOR/DME.

MALSR

MISSED APPROACH: Climb to 2500 then climbing right turn to 3600 direct HIB VOR/DME and hold.

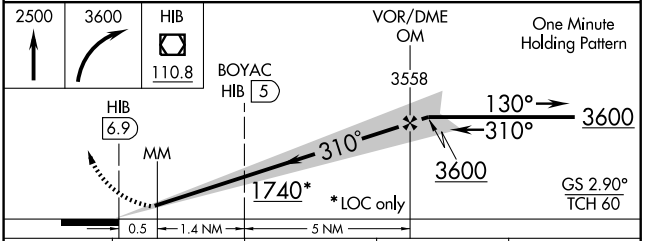
ASOS	DULUTH APP CON*	CLNC DEL	UNICOM
126.425	125.45 255.9	127.4	123.0 (CTAF) L





HIRL Rwy 13-31 L

FAF to MAP 6.9 NM					
Knots	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18



CATEGORY	A	B	C	D
S-ILS 31	1543-½ 200 (200-½)			
S-LOC 31	1740-½ 397 (400-½)			1740-¾ 397 (400-¾)
CIRCLING	1820-1 467 (500-1)	1840-1 487 (500-1)	1840-1½ 487 (500-1½)	1920-2 567 (600-2)
# BOYAC FIX MINIMUMS				
S-LOC 31	1680-½ 337 (400-½)			1680-¾ 337 (400-¾)
CIRCLING	1820-1 467 (500-1)	1840-1 487 (500-1)	1840-1½ 487 (500-1½)	1920-2 567 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	3096
047°	TDZE	1350
	Apt Elev	1353

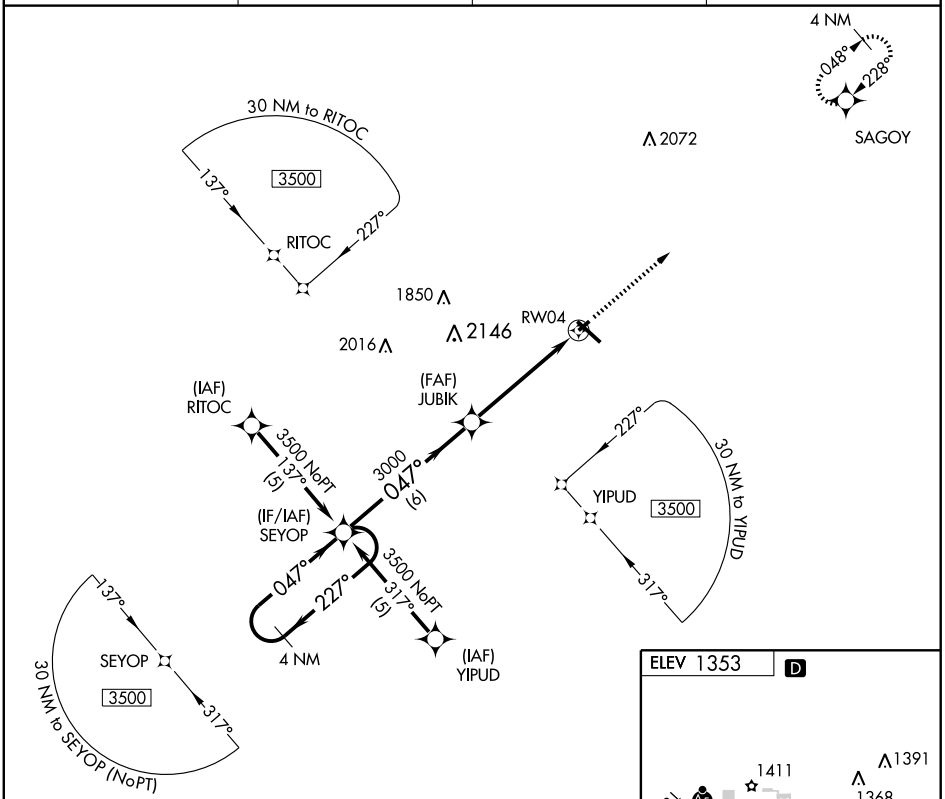
RNAV (GPS) RWY 4

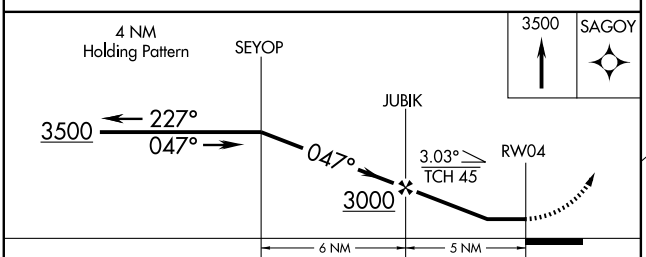
HIBBING/ RANGE RGNL (HIB)

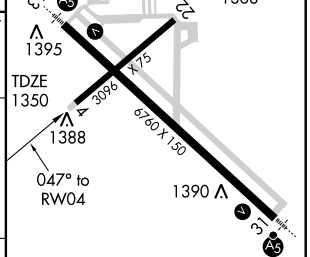
Procedure not authorized at night.
NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3500 direct SAGOY WP and hold.

ASOS	DULUTH APP CON★	CLNC DEL	UNICOM
126.425	125.45 255.9	127.4	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1780-1	430 (500-1)	NA	
CIRCLING	1820-1 467 (500-1)	1840-1 487 (500-1)	NA	

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 13

HIBBING/ RANGE RGNL (HIB)

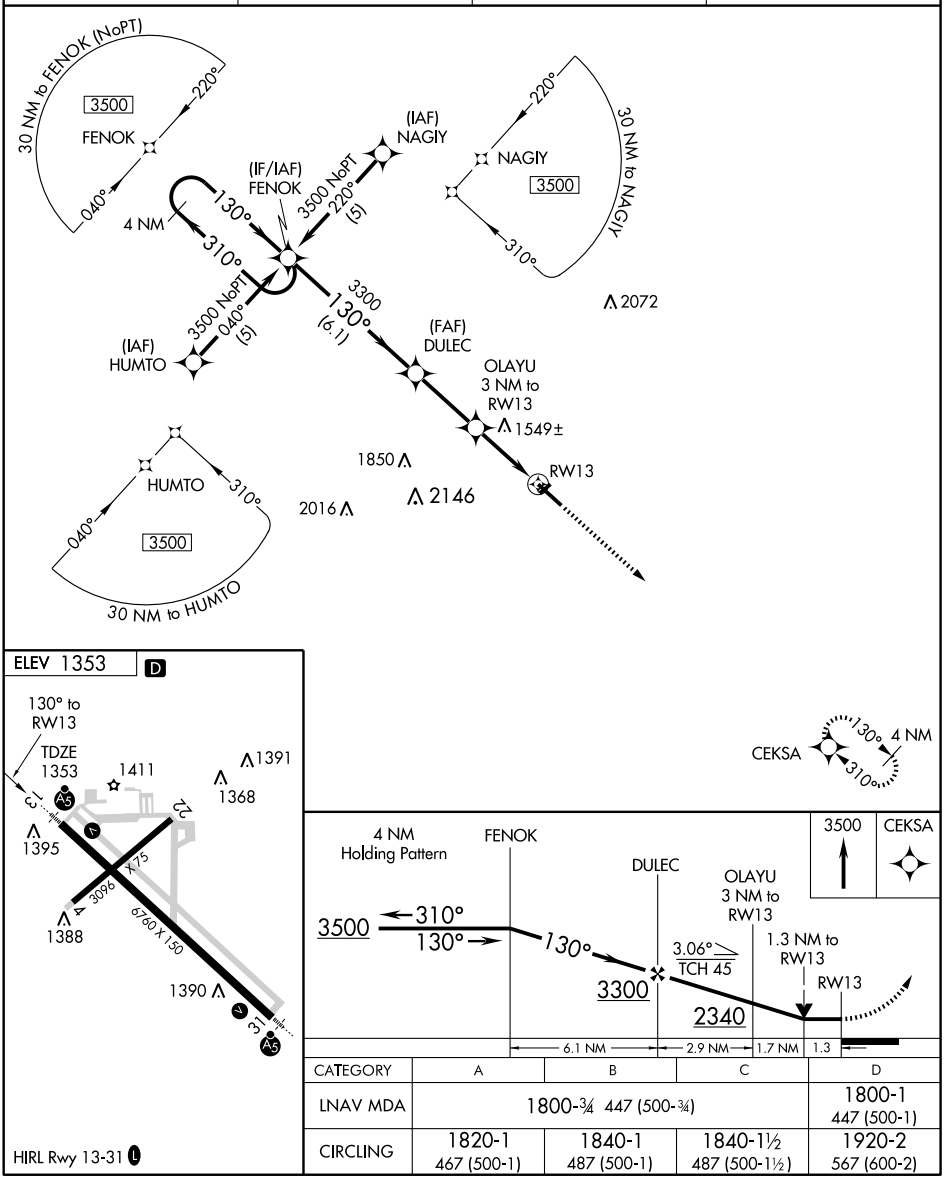
APP CRS	Rwy Idg	6760
130°	TDZE	1353
	Apt Elev	1353

Circling not authorized at night to Rwy 4-22.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
For inoperative MALSR, increase LNAV MDA Cat. A and B to 1 mile.

MALSR

MISSED APPROACH: Climb to 3500 direct CEKSA WP and hold.

ASOS	DULUTH APP CON★	CLNC DEL	UNICOM
126.425	125.45 255.9	127.4	123.0 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	1800-¾ 447 (500-¾)			1800-1 447 (500-1)
CIRCLING	1820-1 467 (500-1)	1840-1 487 (500-1)	1840-1½ 487 (500-1½)	1920-2 567 (600-2)

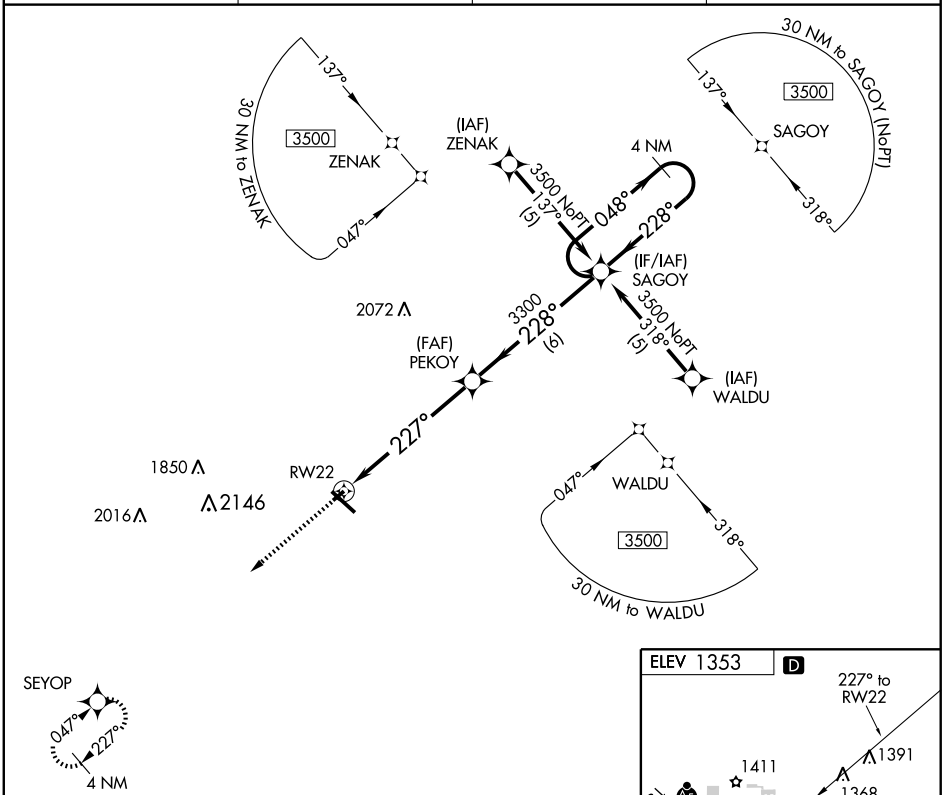
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

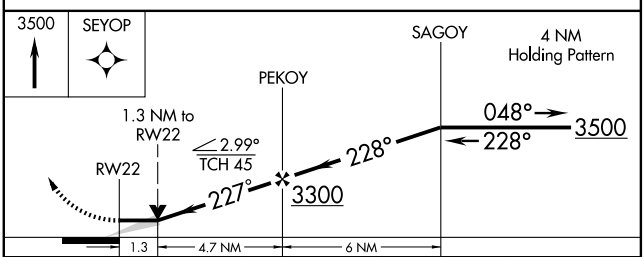
APP CRS	Rwy Idg	3096
227°	TDZE	1350
	Apt Elev	1353

RNAV (GPS) RWY 22

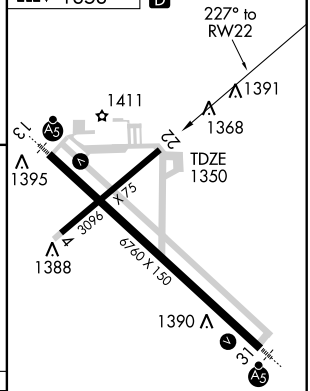
HIBBING/ RANGE RGNL (HIB)

T NA Procedure not authorized at night. GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.		MISSED APPROACH: Climb to 3500 direct SEYOP WP and hold.	
ASOS 126.425	DULUTH APP CON* 125.45 255.9	CLNC DEL 127.4	UNICOM 123.0 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1800-1 450 (500-1)		NA	
CIRCLING	1820-1 467 (500-1)	1840-1 487 (500-1)	NA	



HIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 31

HIBBING/ RANGE RGNL (HIB)

APP CRS	Rwy Idg	6760
310°	TDZE	1343
	Apt Elev	1353

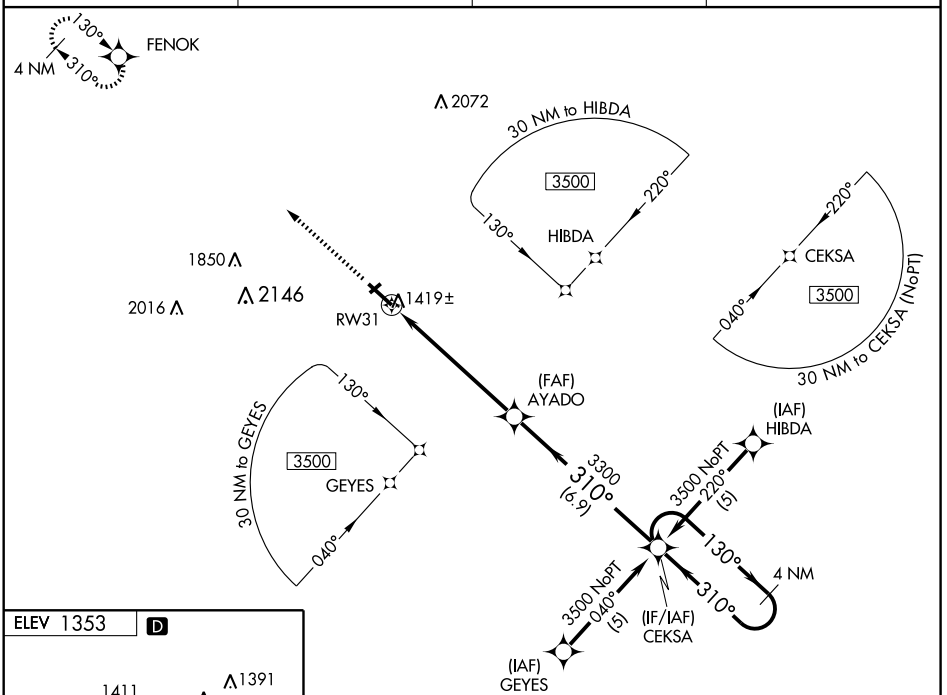
T
A NA

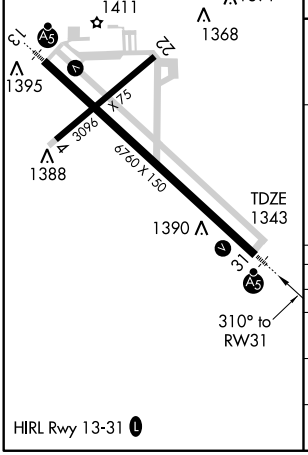
Circling not authorized at night to Rwy 4-22.
Baro-VNAV NA below -17°C (2°F).
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
For inoperative MALSR, increase LNAV Cat. A/B/C visibility to 1 mile.
Inoperative table does not apply to LNAV Cat. D.

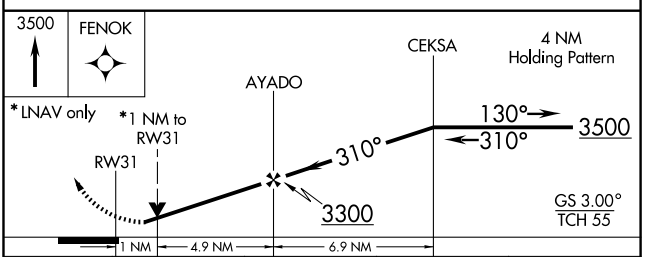
MALSR

MISSED APPROACH: Climb to 3500 direct FENOK WP and hold.

ASOS	DULUTH APP CON ★	CLNC DEL	UNICOM
126.425	125.45 255.9	127.4	123.0 (CTAF) L







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/ VNAV DA	1700-¾ 357 (400-¾)			
LNAV MDA	1700-¾ 357 (400-¾)			1700-1 357 (400-1)
CIRCLING	1820-1¼ 467 (500-1¼)	1840-1¼ 487 (500-1¼)	1840-1½ 487 (500-1½)	1920-2 567 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME HIB	APP CRS	Rwy Idg	6760
110.8	131°	TDZE	1353
Chan 45		Apt Elev	1353

VOR RWY 13

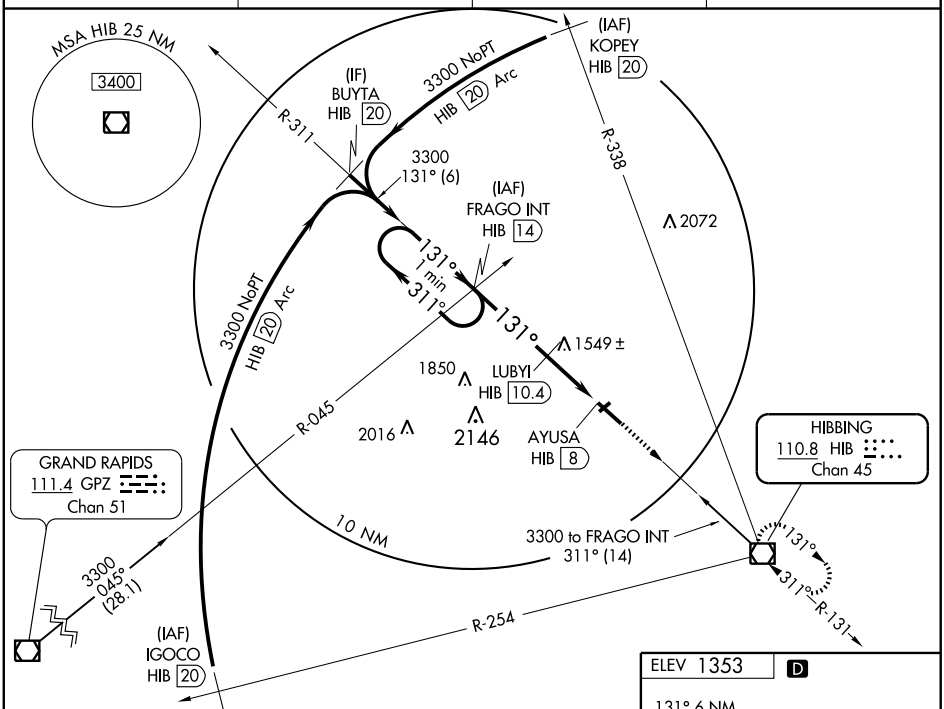
HIBBING/ RANGE RGNL (HIB)

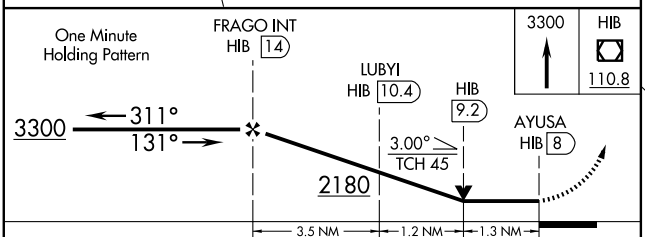
For inoperative MALSR increase S-13 Cat A to 1 mile.
LUBYI FIX MINIMUMS: Increase Cat A and B to 1 mile.

MALSR

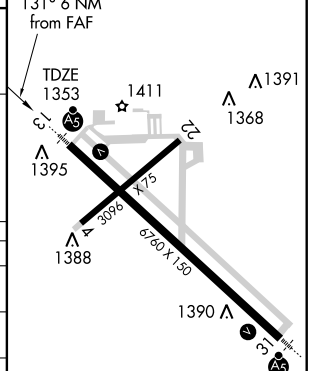
MISSED APPROACH: Climb to 3300 direct HIB VOR/DME and hold.

ASOS	DULUTH APP CON★	CLNC DEL	UNICOM
126.425	125.45 255.9	127.4	123.0 (CTAF) L





CATEGORY	A	B	C	D
S-13	2180-¾ 827 (900-¾)		2180-2 827 (900-2)	2180-2¼ 827 (900-2¼)
CIRCLING	2180-1 827 (900-1)	2180-1¼ 827 (900-1¼)	2180-2½ 827 (900-2½)	2180-2¾ 827 (900-2¾)
LUBYI FIX MINIMUMS				
S-13	1800-¾ 447 (500-¾)			1800-1 447 (500-1)
CIRCLING	1820-1 467 (500-1)	1840-1 487 (500-1)	1840-1½ 487 (500-1½)	1920-2 567 (600-2)



FAF to MAP 6 NM					
Knots	60	90	120	150	180
Min:Sec	6:00	4:00	3:00	2:24	2:00

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME HIB	APP CRS	Rwy Idg	6760
110.8	311°	TDZE	1343
Chan 45		Apt Elev	1353

VOR RWY 31

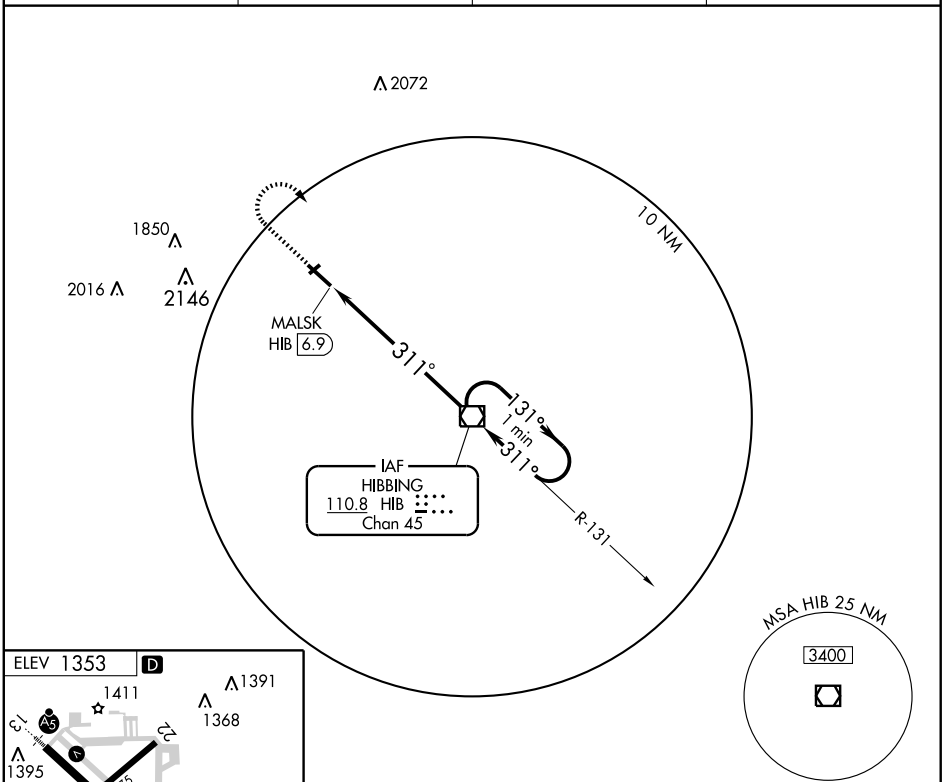
HIBBING/ RANGE RGNL (HIB)

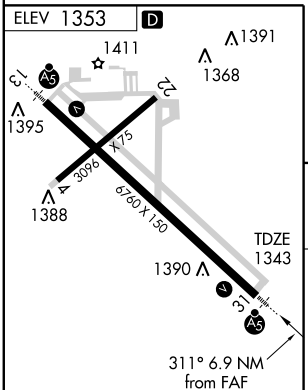
For inoperative MALSR, increase S-31 Cat. A and B visibility to 1 mile and Cat D visibility to 1¼ miles.

MALSR

MISSED APPROACH: Climb to 2500 then climbing right turn to 3500 direct HIB VOR/DME and hold.

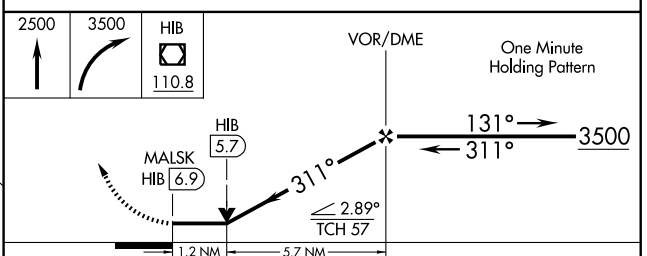
ASOS	DULUTH APP CON★	CLNC DEL	UNICOM
126.425	125.45 255.9	127.4	123.0 (CTAF)





HIRL Rwy 13-31 (L)

FAF to MAP 6.9 NM					
Knots	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18



CATEGORY	A	B	C	D
S-31	1760-¾ 417 (500-¾)			1760-1 417 (500-1)
CIRCLING	1820-1 467 (500-1)	1840-1 487 (500-1)	1840-1½ 487 (500-1½)	1920-2 567 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

HINCKLEY

FIELD OF DREAMS (04W) 1 E UTC−6(−5DT) N46°01.37′ W92°53.71′ — TWIN CITIES
1021 B **FUEL** 100LL NOTAM FILE PNM — L–14I
RWY 06–24: H2751X75 (ASPH) MIRL 0.4% up SW — IAP
RWY 06: Thld dsplcd 190′. Tree. **RWY 24:** Thld dsplcd 394′. Tree.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Self svc fuel avbl 24 hrs with credit card. ACTIVATE MIRL Rwy 06–24—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.225 (320) 384–6169.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 121.05
RADIO AIDS TO NAVIGATION: NOTAM FILE STC.
ST CLOUD (T) VOR/DME 112.1 STC Chan 58 N45°32.96′ W94°03.52′ 056° 56.5 NM to fld. 1023/3E **ASOS.** VOR unmonitored.

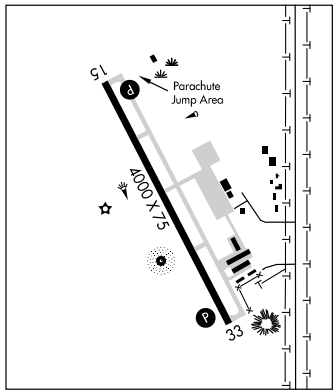
HOPEY N44°52.40′ W92°56.53′ NOTAM FILE STP. — TWIN CITIES
NDB (MHW) 400 PPI 303° 6.2 NM to St Paul Downtown Holman Fld. — L–12J, 14I, A

HOUSTON CO (See CALEDONIA)

HUMBOLDT N48°52.15′ W97°07.03′ NOTAM FILE PNM. — TWIN CITIES
(H) VORTAC 112.4 HML Chan 71 303° 6.6 NM to Pembina Muni. 800/9E. — H–2H, L–14G
RCO 122.1R 112.4T (PRINCETON RADIO)

HUSSK N45°28.74′ W93°58.12′ NOTAM FILE STC. — TWIN CITIES
NDB (LOM) 342 ST 314° 5.6 NM to St Cloud Muni.

HUTCHINSON MUNI–BUTLER FIELD (HCD) 2 S UTC−6(−5DT) N44°51.59′ W94°22.95′ — TWIN CITIES
1062 B S4 **FUEL** 100LL, JET A NOTAM FILE HCD — L–12I, 14H
RWY 15–33: H4000X75 (ASPH) MIRL — IAP
RWY 15: REIL. PAPI(P4L)—GA 3.0° TCH 40′.
RWY 33: REIL. PAPI(P4L)—GA 3.0 TCH 40′. Trees.
AIRPORT REMARKS: Attended continuously. Fuel avbl 24 hrs with credit card. Parachute Jumping. ACTIVATE MIRL Rwy 15–33; REIL Rwy 15 and Rwy 33, PAPI Rwy 15 and Rwy 33—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.525 (320) 587–3343.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.1
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
DARWIN (L) VORTAC 109.0 DWN Chan 27 N45°05.25′ W94°27.23′ 160° 14.0 NM to fld. 1130/7E.
NDB (MHW) 209 HCD N44°51.42′ W94°22.98′ at fld. NOTAM FILE HCD.



INTERNATIONAL FALLS N48°33.95′ W93°24.34′ NOTAM FILE INL. — TWIN CITIES
(L) VORTACW 111.0 INL Chan 47 at Falls Intl. 1180/6E. **HIWAS.** — L–14H
RCO 123.6 (PRINCETON RADIO)

RNAV (GPS) RWY 6

HINCKLEY/ FIELD OF DREAMS (Ø4W)

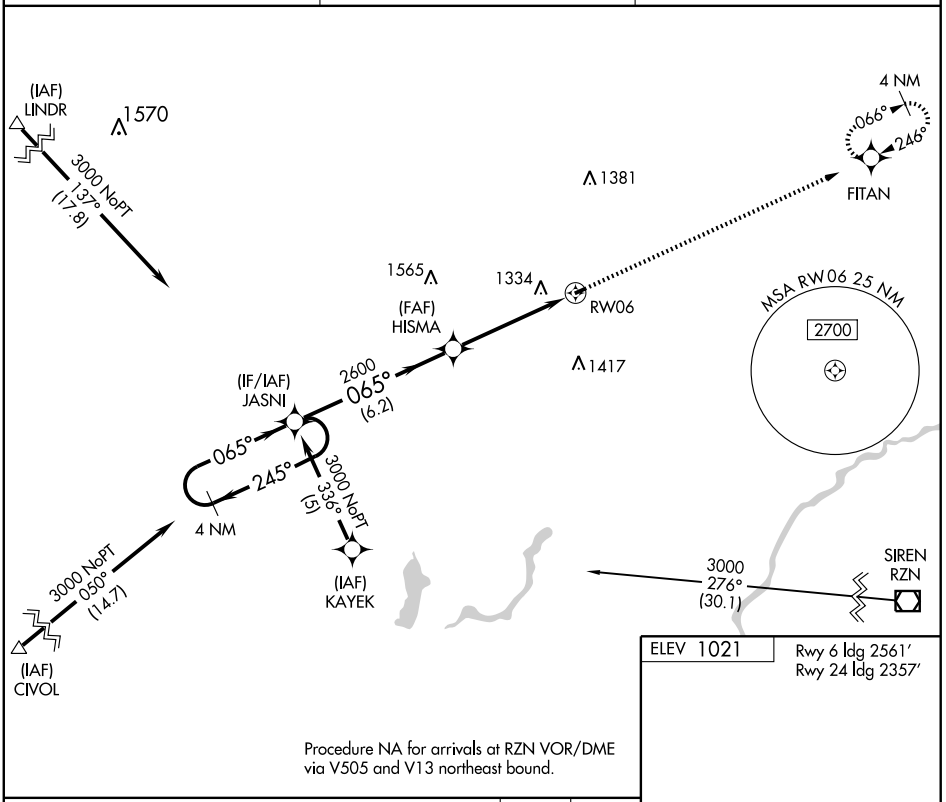
APP CRS	Rwy Idg	2561
065°	TDZE	1021
	Apt Elev	1021

DME/DME RNP-0.3 NA.
VDP NA when using Mora altimeter setting.
When local altimeter setting not received, use Mora altimeter setting and increase all MDAs 60 feet.

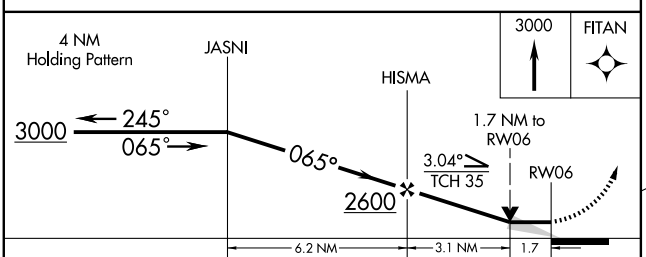
NA

MISSED APPROACH: Climb to 3000 direct FITAN and hold.

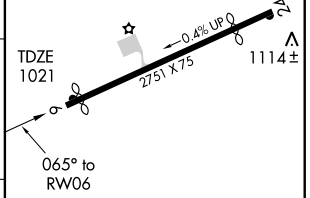
AWOS-3	MINNEAPOLIS CENTER	CTAF
118.225	121.05 397.9	122.9 L



Procedure NA for arrivals at RZN VOR/DME via V505 and V13 northeast bound.



CATEGORY	A	B	C	D
LNAV MDA	1600-1	579 (600-1)	NA	
CIRCLING	1640-1	619 (700-1)	NA	



MIRL Rwy 6-24 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 24

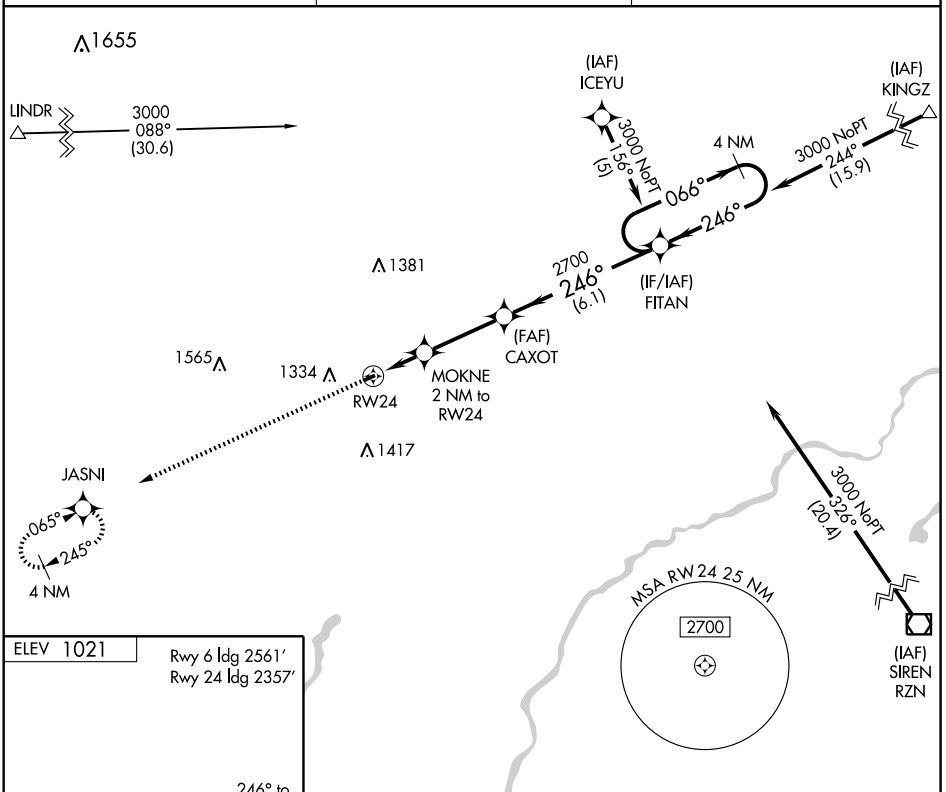
HINCKLEY/ FIELD OF DREAMS (Ø4W)

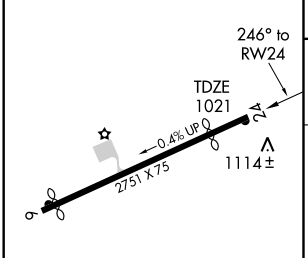
APP CRS	Rwy Idg	2357
246°	TDZE	1021
	Apt Elev	1021

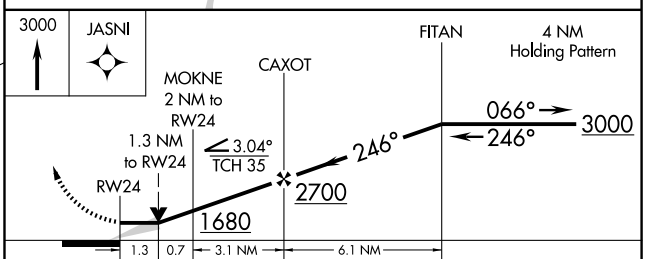
DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Mora altimeter setting and increase all MDAs 60 feet.
VDP NA when using Mora altimeter setting.

MISSED APPROACH: Climb to 3000 direct JASNI and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.225	121.05 397.9	122.9 L







CATEGORY	A	B	C	D
LNAV MDA	1380-1 359 (400-1)		NA	
CIRCLING	1640-1 619 (700-1)		NA	

MIRL Rwy 6-24 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

HINCKLEY

FIELD OF DREAMS (04W) 1 E UTC−6(−5DT) N46°01.37′ W92°53.71′ — TWIN CITIES
1021 B **FUEL** 100LL NOTAM FILE PNM — L–14I
RWY 06–24: H2751X75 (ASPH) MIRL 0.4% up SW — IAP
RWY 06: Thld dsplcd 190′. Tree. **RWY 24:** Thld dsplcd 394′. Tree.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Self svc fuel avbl 24 hrs with credit card. ACTIVATE MIRL Rwy 06–24—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.225 (320) 384–6169.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 121.05
RADIO AIDS TO NAVIGATION: NOTAM FILE STC.
ST CLOUD (T) VOR/DME 112.1 STC Chan 58 N45°32.96′ W94°03.52′ 056° 56.5 NM to fld. 1023/3E **ASOS.** VOR unmonitored.

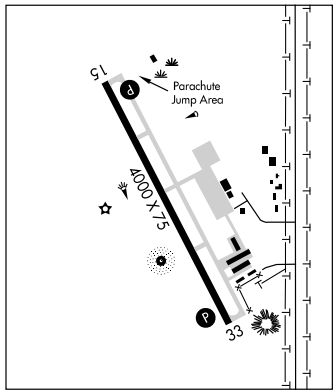
HOPEY N44°52.40′ W92°56.53′ NOTAM FILE STP. — TWIN CITIES
NDB (MHW) 400 PPI 303° 6.2 NM to St Paul Downtown Holman Fld. — L–12J, 14I, A

HOUSTON CO (See CALEDONIA)

HUMBOLDT N48°52.15′ W97°07.03′ NOTAM FILE PNM. — TWIN CITIES
(H) VORTAC 112.4 HML Chan 71 303° 6.6 NM to Pembina Muni. 800/9E. — H–2H, L–14G
RCO 122.1R 112.4T (PRINCETON RADIO)

HUSSK N45°28.74′ W93°58.12′ NOTAM FILE STC. — TWIN CITIES
NDB (LOM) 342 ST 314° 5.6 NM to St Cloud Muni.

HUTCHINSON MUNI–BUTLER FIELD (HCD) 2 S UTC−6(−5DT) N44°51.59′ W94°22.95′ — TWIN CITIES
1062 B S4 **FUEL** 100LL, JET A NOTAM FILE HCD — L–12I, 14H
RWY 15–33: H4000X75 (ASPH) MIRL — IAP
RWY 15: REIL. PAPI(P4L)—GA 3.0° TCH 40′.
RWY 33: REIL. PAPI(P4L)—GA 3.0 TCH 40′. Trees.
AIRPORT REMARKS: Attended continuously. Fuel avbl 24 hrs with credit card. Parachute Jumping. ACTIVATE MIRL Rwy 15–33; REIL Rwy 15 and Rwy 33, PAPI Rwy 15 and Rwy 33—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.525 (320) 587–3343.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.1
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
DARWIN (L) VORTAC 109.0 DWN Chan 27 N45°05.25′ W94°27.23′ 160° 14.0 NM to fld. 1130/7E.
NDB (MHW) 209 HCD N44°51.42′ W94°22.98′ at fld. NOTAM FILE HCD.



INTERNATIONAL FALLS N48°33.95′ W93°24.34′ NOTAM FILE INL. — TWIN CITIES
(L) VORTACW 111.0 INL Chan 47 at Falls Intl. 1180/6E. **HIWAS.** — L–14H
RCO 123.6 (PRINCETON RADIO)

NDB HCD 209	APP CRS 151°	Rwy Idg 4000 TDZE 1060 Apt Elev 1060

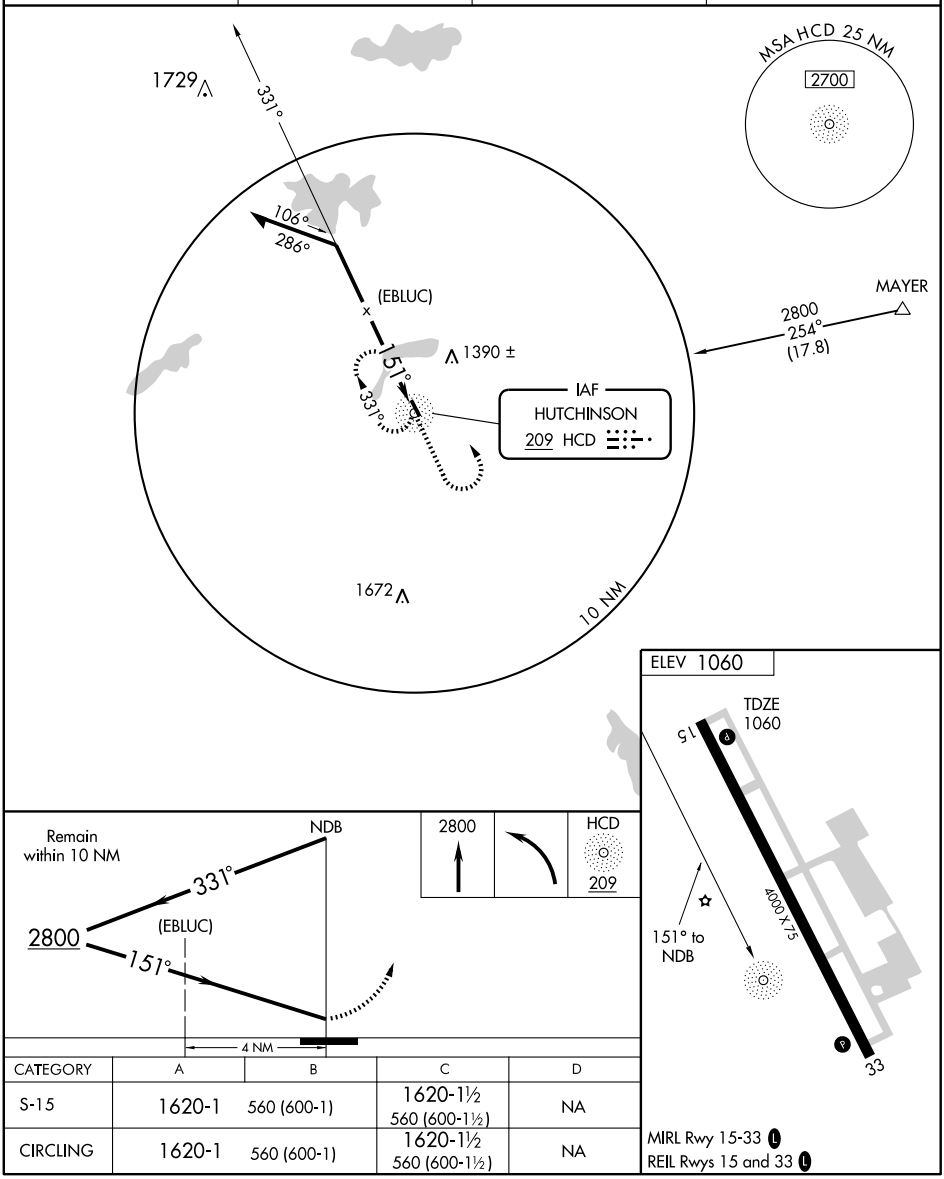
NDB or GPS RWY 15

HUTCHINSON MUNI-BUTLER FIELD (HCD)

NA

MISSED APPROACH: Climb to 2800, then left turn direct HCD NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.525	127.1 290.2	121.725	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-15	1620-1	560 (600-1)	1620-1½ 560 (600-1½)	NA
CIRCLING	1620-1	560 (600-1)	1620-1½ 560 (600-1½)	NA

MIRL Rwy 15-33 L
REIL Rwys 15 and 33 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

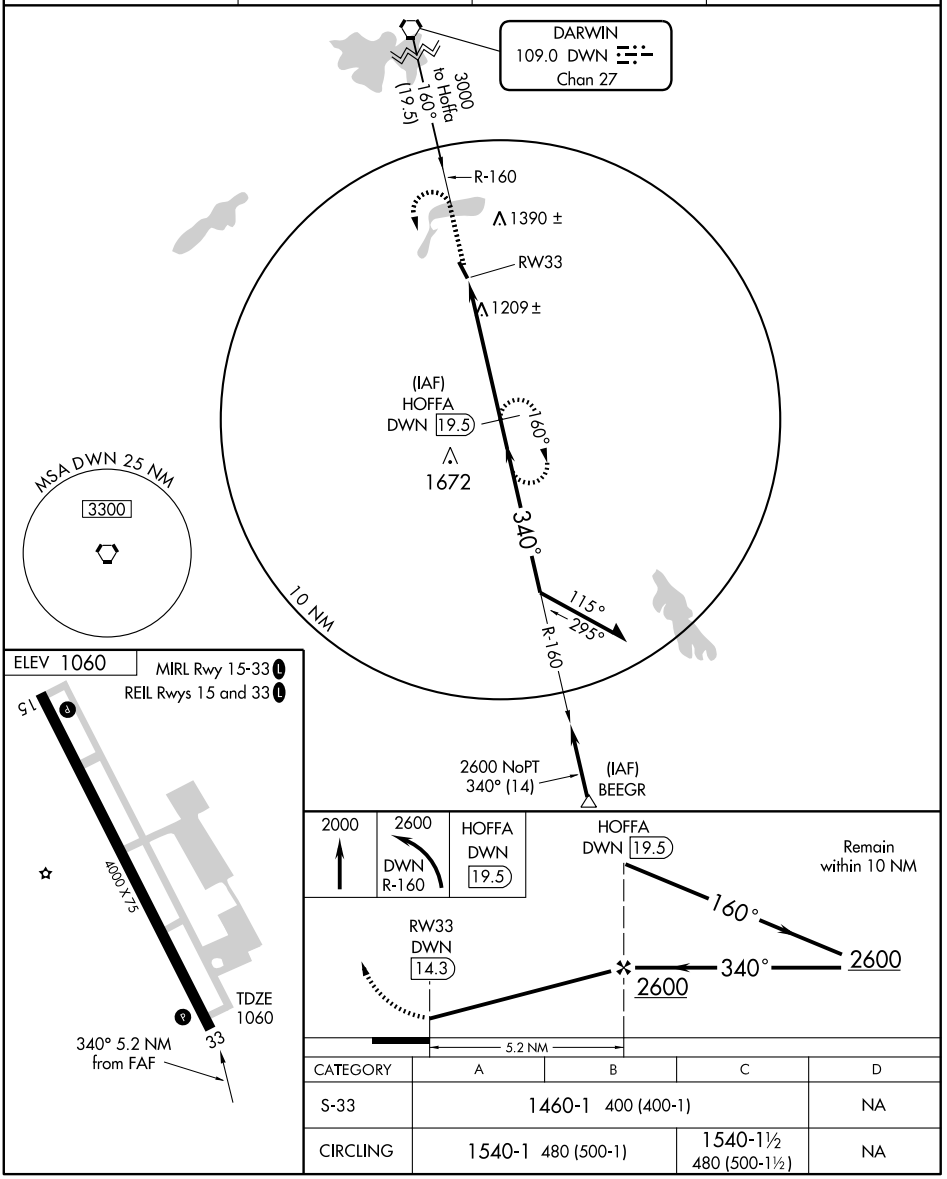
VORTAC DWN	APP CRS	Rwy Idg	4000
109.0	340°	TDZE	1060
Chan 27		Apt Elev	1060

VOR/DME or GPS RWY 33

HUTCHINSON MUNI-BUTLER FIELD (HCD)

MISSED APPROACH: Climb to 2000 then climbing left turn to 2600 via DWN R-160 to HOFFA/19.5 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.525	127.1 290.2	121.725	122.8 (CTAF) L

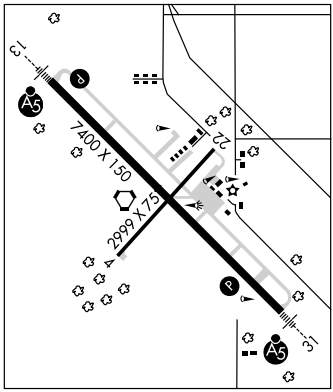


CATEGORY	A	B	C	D
S-33	1460-1 400 (400-1)			NA
CIRCLING	1540-1 480 (500-1)		1540-1½ 480 (500-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

INTERNATIONAL FALLS

FALLS INTL (INL) 0 S UTC−6(−5DT) N48°33.94′ W93°24.13′ **TWIN CITIES**
1185 B **FUEL** 100LL, JET A TPA—2185(1000) AOE Class I, ARFF Index A **H–2J, L–14H**
NOTAM FILE INL **IAP**



RWY 13–31: H7400X150 (ASPH–PFC) S–100, D–125, 2S–159, 2D–190 HIRL
RWY 13: MALSR. PAPI(P4L). TCH 52′. Trees.
RWY 31: MALSR. PAPI(P4L)—GA 3.0° TCH 45′.
RWY 04–22: H2999X75 (ASPH) S–12.5 0.4% up NE
RWY 04: Trees. **RWY 22:** Trees.
RUNWAY DECLARED DISTANCE INFORMATION

RWY 04:	TORA–2999	TODA–2999	ASDA–2999	LDA–2999
RWY 13:	TORA–7400	TODA–7400	ASDA–7400	LDA–7400
RWY 22:	TORA–2999	TODA–2999	ASDA–2999	LDA–2999
RWY 31:	TORA–7400	TODA–7400	ASDA–7400	LDA–7400

AIRPORT REMARKS: Attended dalgt hrs. For attendant after hrs call 218–283–2712 or 218–286–5245. Gulls and deer on and invof arpt. PPR for unscheduled air carrier ops with more than 30 passenger seats, call arpt manager or ops 218–283–4461. Air carrier ops involving acft with more than 30 passengers are not authorized in excess of 15 minutes before or after scheduled arrival/departure times without prior coordination with arpt manager and confirmation that ARFF is avbl prior to landing or takeoff. ACTIVATE HIRL Rwy 13–31, MALSR Rwy 13 and Rwy 31, PAPI Rwy 13 and Rwy 31—CTAF. Flight Notification Service (ADCUS) available.
WEATHER DATA SOURCES: ASOS 120.000 (218) 285–2996. **HIWAS** 111.0 INL.
COMMUNICATIONS: CTAF/UNICOM 122.8
INTERNATIONAL FALLS RCO 123.6 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 120.9
RADIO AIDS TO NAVIGATION: NOTAM FILE INL.
INTERNATIONAL FALLS (L) VORTACW 111.0 INL Chan 47 N48°33.95′ W93°24.34′ at fld. 1180/6E. **HIWAS.**
RAIZE NDB (H/LOM) 353 IN N48°28.88′ W93°16.68′ 310° 7.1 NM to fld.
ILS 109.1 I–ABK Rwy 13 Class IB. Unmonitored
ILS 111.95 I–INL Rwy 31 Class IA. LOM RAIZE NDB. LOC unusable within 0.2 NM inbound. LOC unusable byd 26° right and left of course.

INTERNATIONAL FALLS SPB (Ø9I) 1 E UTC−6(−5DT) N48°36.35′ W93°22.25′ **TWIN CITIES**
1110 TPA—1710(600) NOTAM FILE PNM
WATERWAY 05–23: 5000X1000 (WATER)
WATERWAY 08–26: 5000X1000 (WATER)
SEAPLANE REMARKS: Unattended. Unicom located at Falls Intl arpt. Acft requiring U.S. Customs ctc Princeton AFSS on 123.6 15 minutes prior to arr also call U.S. Customs at 218–283–2541 prior to tkf. Pilots ctc Falls Intl arpt on 122.8 for aeronautical advisory information for the seaplane base. Pilots maintain 500′AGL TPA separation from tfc at Falls Intl arpt 2 miles SW.
COMMUNICATIONS: CTAF/UNICOM 122.8

INVER GROVE HEIGHTS

WIPLINE SPB (Ø9Y) 2 SE UTC−6(−5DT) N44°49.65′ W93°00.52′ **TWIN CITIES**
687 S4 **FUEL** 100LL, JET A NOTAM FILE PNM
WATERWAY 17–35: 8000X500 (WATER)
WATERWAY 35: Rgt tfc.
SEAPLANE REMARKS: Attended continuously. CAUTION required at all times on river for floating debris. River channel marked by buoys.
COMMUNICATIONS: CTAF 122.9

ISEDOR IVERSON (See McGREGOR)

LOC I-INL	APP CRS	Rwy Idg	7400
111.95	313°	TDZE	1166
		Apt Elev	1185

COPTER ILS or LOC RWY 31

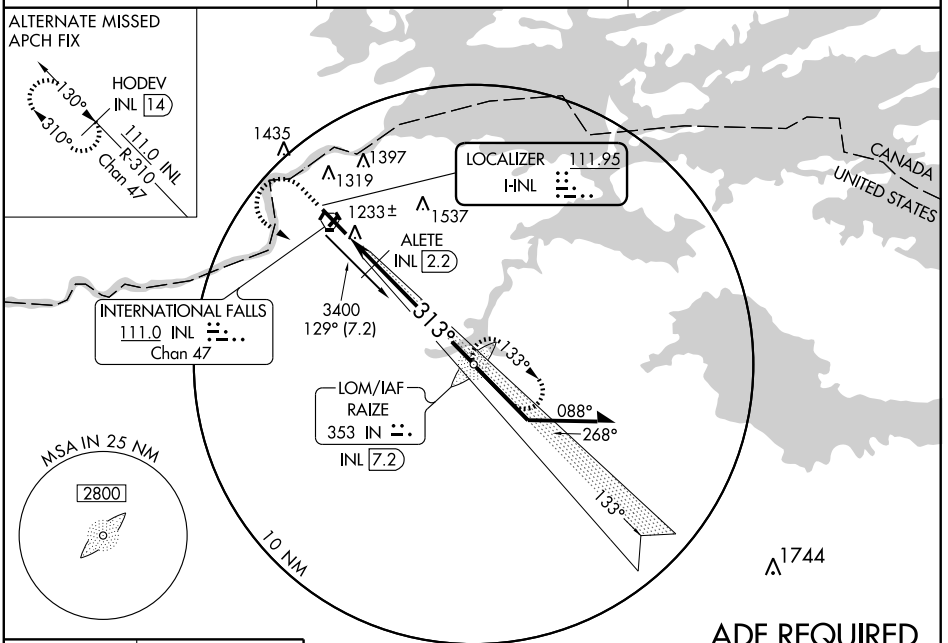
INTERNATIONAL FALLS/FALLS INTL (INL)

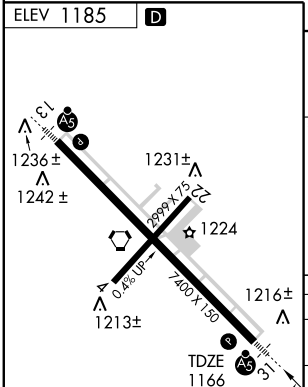
Inoperative table does not apply.
When local altimeter setting not received, use Baudette altimeter setting and increase DA 127 feet and ILS visibility ⅜ mile, increase all MDAs 140 feet.

MALSR

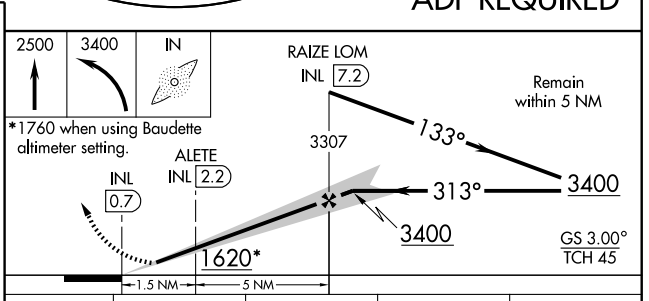
MISSED APPROACH: Climb to 2500 then climbing left turn to 3400 direct RAIZE LOM and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF) L





FAF to MAP 6.5 NM					
Knots	45	60	75	90	105
Min:Sec	8:40	6:30	5:12	4:20	3:43



CATEGORY	COPTER	B	C	D
H-ILS 31	1366-⅜ 200 (200-⅜)	NA		
H-LOC 31	1620-½ 454 (500-½)	NA		
CIRCLING	NA			
ALETE FIX MINIMUMS				
H-LOC 31	1520-½ 354 (400-½)	NA		
CIRCLING	NA			

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC I-ABK	APP CRS	Rwy Idg	7400
109.1	133°	TDZE	1184
		Apt Elev	1185

ILS or LOC/DME RWY 13

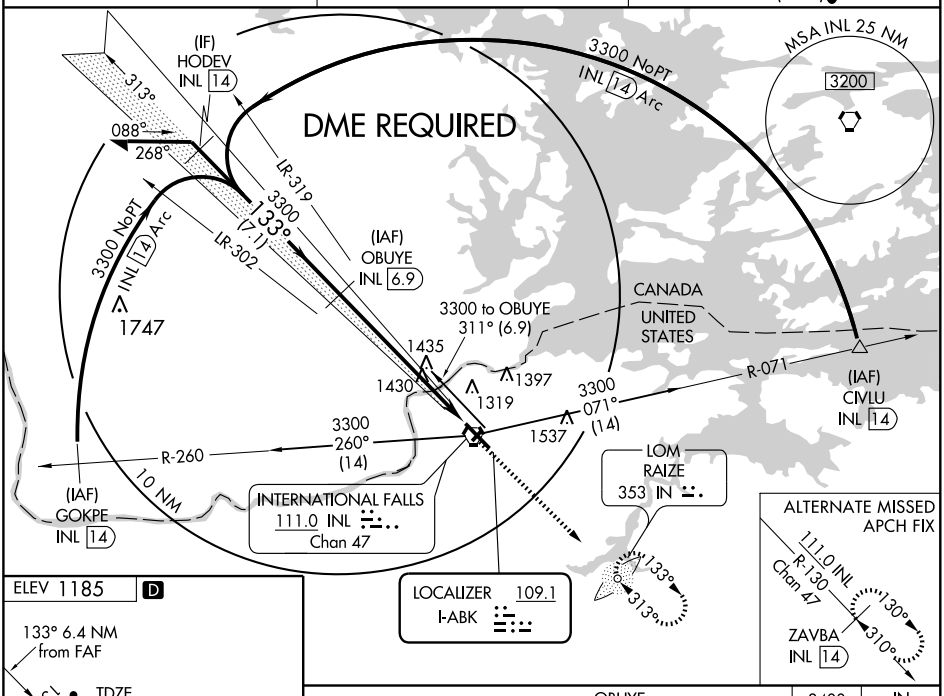
INTERNATIONAL FALLS/FALLS INTL (INL)

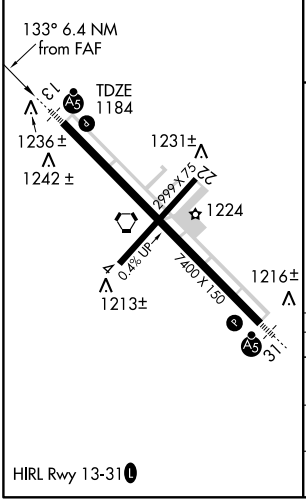
When local altimeter setting not received, use Baudette altimeter setting and increase DAs 127 feet and S-ILS 13 visibility ¼ mile all Cats, increase all MDAs 140 feet and S-LOC 13 Cat B visibility ¼ mile, Cat C and D ½ mile, increase Circling Cat B visibility ¼ mile, Cat C and D ½ mile. For inoperative MALSR when using Baudette altimeter setting, increase S-ILS 13 visibility ½ mile all Cats. ADF required. Circling to Rwy 4-22 NA at night. DME from INL VORTAC. Simultaneous reception of I-ABK and INL DME required. Caution opposing ILS continously on.

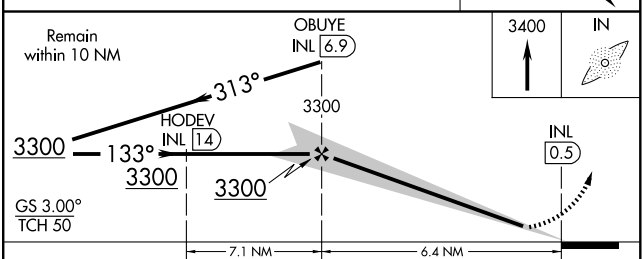
MALSR

MISSED APPROACH: Climb to 3400 direct IN LOM and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 13	1384-½ 200 (200-½)			
S-LOC 13	1820-½ 636 (700-½)		1820-1¼ 636 (700-1¼)	1820-1½ 636 (700-1½)
CIRCLING	1820-1 635 (700-1)		1820-1¾ 635 (700-1¾)	1820-2 635 (700-2)

HIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC I-INL	APP CRS	Rwy Idg	7400
111.95	313°	TDZE	1166
		Apt Elev	1185

ILS or LOC RWY 31

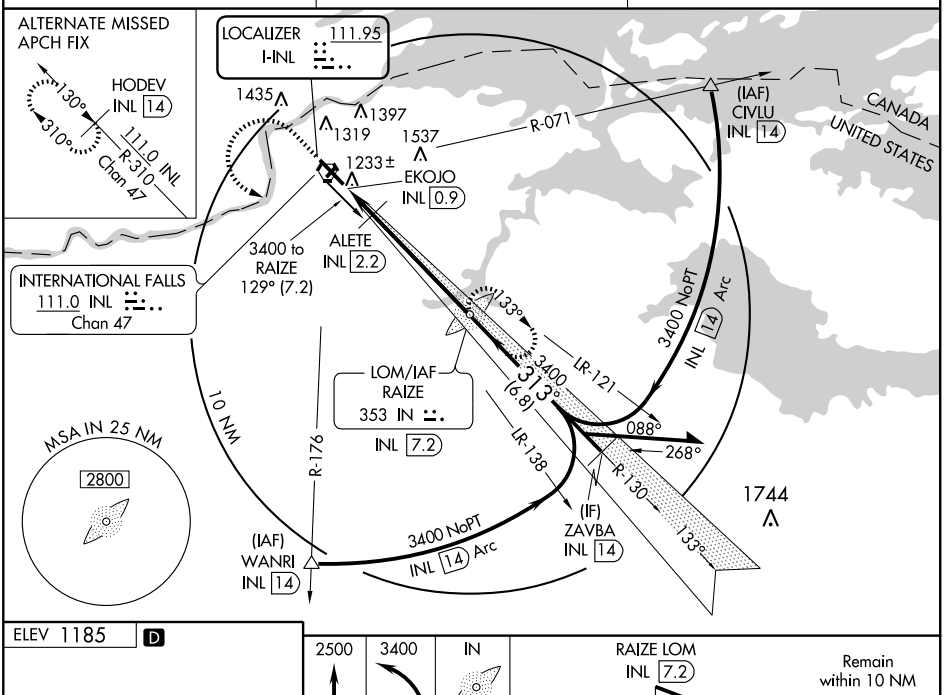
INTERNATIONAL FALLS/FALLS INTL (INL)

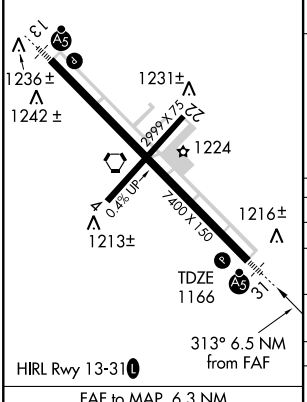
Circling to Rwy 4-22 NA at night. ADF required. Autopilot coupled approach NA below 2250 feet. When local altimeter setting not received, use Baudette altimeter setting and increase DA 127 feet and S-ILS visibility ¼ mile all Cats, increase all MDA 140 feet and increase all Cat C/D visibility ¼ mile. Caution opposing ILS continously on.

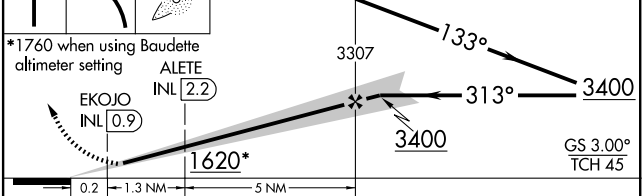
MALSR

MISSED APPROACH: Climb to 2500 then climbing left turn to 3400 direct RAIZE LOM/INL VORTAC 7.2 DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 31	1366-½ 200 (200-½)			
S-LOC 31	1620-½ 454 (500-½)		1620-¾ 454 (500-¾)	1620-1 454 (500-1)
CIRCLING	1620-1 435 (500-1)	1680-1 495 (500-1)	1680-1½ 495 (500-1½)	1780-2 595 (600-2)
ALETE FIX MINIMUMS				
S-LOC 31	1520-½ 354 (400-½)			1520-¾ 354 (400-¾)
CIRCLING	1620-1 435 (500-1)	1680-1 495 (500-1)	1680-1½ 495 (500-1½)	1780-2 595 (600-2)

FAF to MAP 6.3 NM					
Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOM IN	APP CRS	Rwy Idg	7400
353	313°	TDZE	1166
		Apt Elev	1185

NDB RWY 31

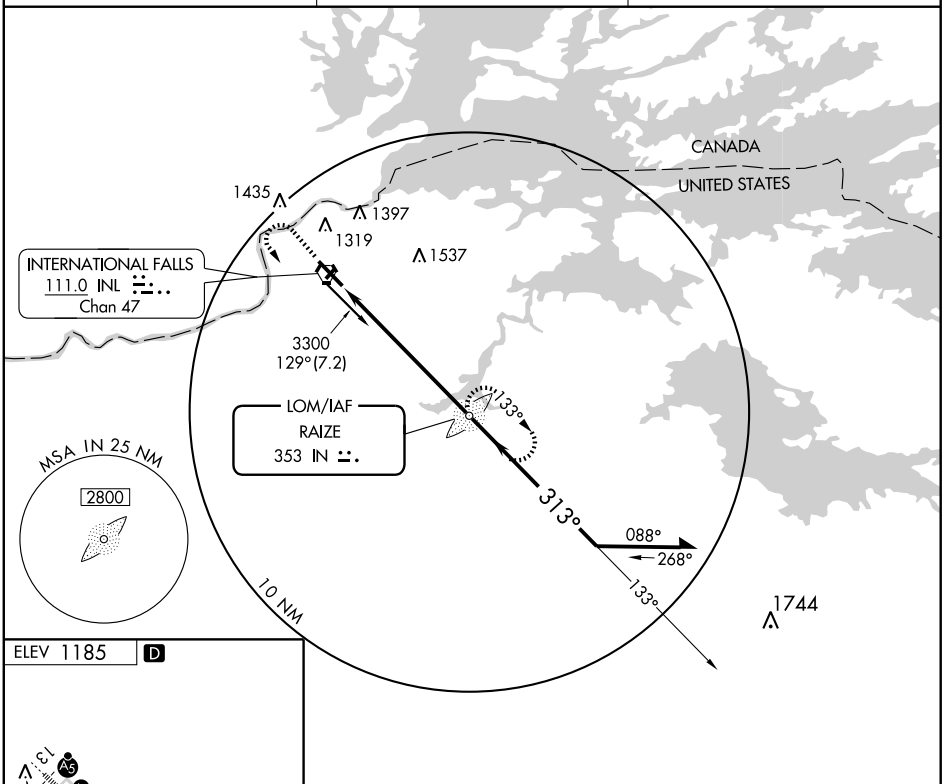
INTERNATIONAL FALLS/FALLS INTL (INL)

Circling to Rwy 4-22 NA at night.
When local altimeter setting not received, use Baudette altimeter setting and increase all MDAs 140 feet, and S-31 Cats C/D visibility ½ mile, Circling Cat C ½ mile, Cat D ¼ mile.

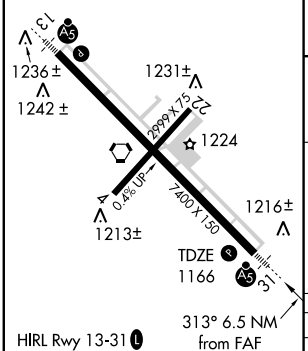
MALSR

MISSED APPROACH: Climb to 2500 then climbing left turn to 3300 direct IN LOM and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF)

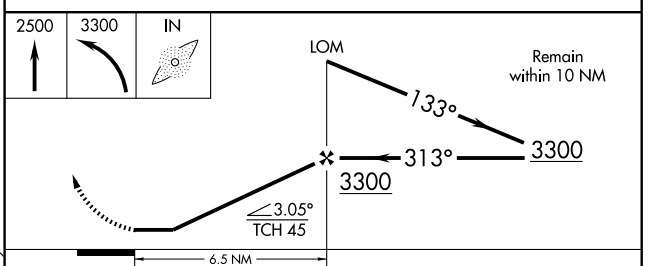


ELEV 1185 D



HIRL Rwy 13-31

FAF to MAP 6.5 NM					
Knots	60	90	120	150	180
Min:Sec	6:30	4:20	3:15	2:36	2:10



CATEGORY	A	B	C	D
S-31	1700-¾ 534 (600-¾)		1700-1 534 (600-1)	1700-1½ 534 (600-1½)
CIRCLING	1700-1 515 (600-1)		1700-1½ 515 (600-1½)	1780-2 595 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	7400
CH 53706	133°	TDZE	1184
W13A		Apt Elev	1185

RNAV (GPS) RWY 13

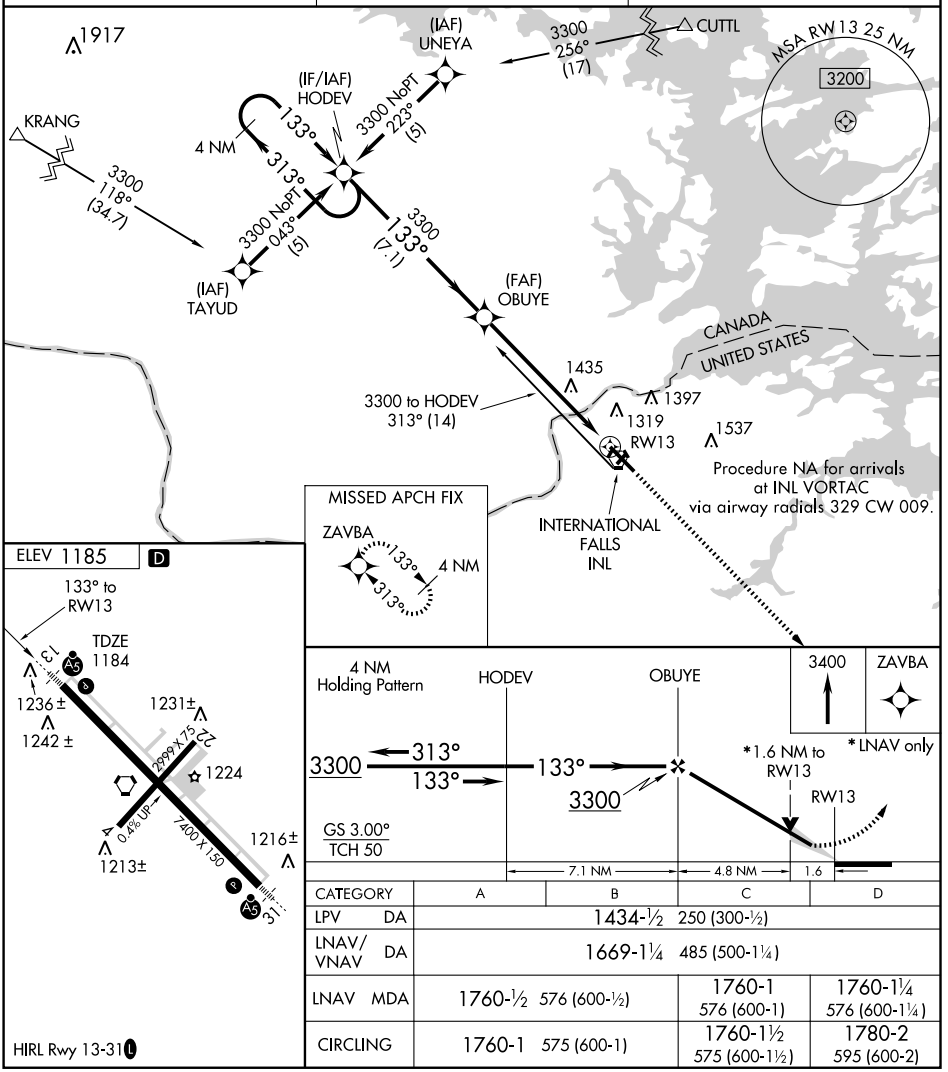
INTERNATIONAL FALLS/FALLS INTL (INL)

When local altimeter setting not received, use Baudette altimeter setting and increase all DAs 127 feet, increase LPV visibility ¼ mile all Cats, and LNAV/VNAV visibility ¾ mile all Cats, increase all MDAs 140 feet, increase LNAV Cat C and D visibility ½ mile, Circling Cat C visibility ½ mile and Cat D visibility ¼ mile. For inoperative MALSR when using Baudette altimeter setting, increase LPV visibility ½ mile all Cats, inoperative table does not apply to LNAV/VNAV. VDP NA when using Baudette altimeter setting. Baro-VNAV NA when using Baudette altimeter setting. Circling to Rwy 4-22 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F). DME/DME RNP- 0.3 NA.

MALSR

MISSED APPROACH: Climb to 3400 direct ZAVBA and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF)



CATEGORY	A	B	C	D
LPV DA	1434-½ 250 (300-½)			
LNAV/VNAV DA	1669-1¼ 485 (500-1¼)			
LNAV MDA	1760-½ 576 (600-½)		1760-1 576 (600-1)	1760-1¼ 576 (600-1¼)
CIRCLING	1760-1 575 (600-1)		1760-1½ 575 (600-1½)	1780-2 595 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	7400
CH 78406	313°	TDZE	1166
W31A		Apt Elev	1185

RNAV (GPS) RWY 31

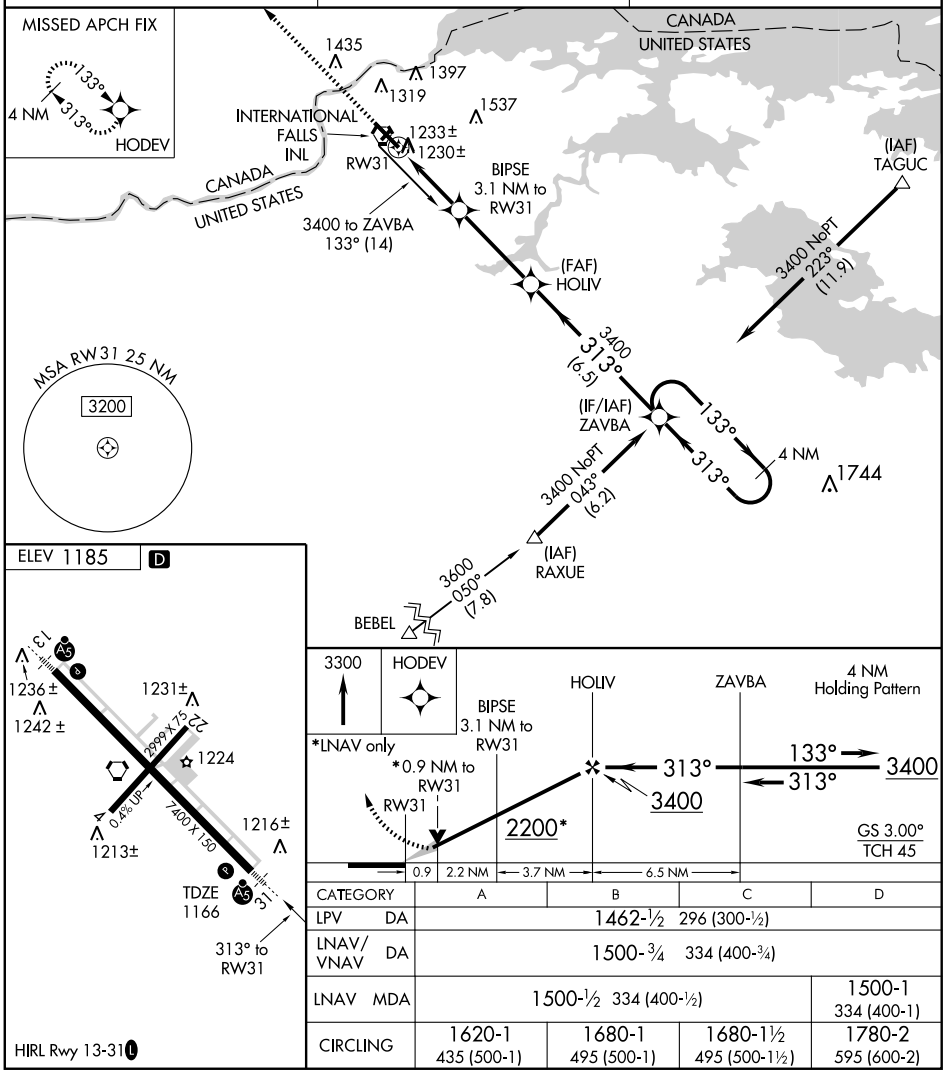
INTERNATIONAL FALLS/FALLS INTL (INL)

V A W When local altimeter setting not received, use Baudette altimeter setting and increase all DAs 127 feet, and LPV and LNAV/VNAV visibility ½ mile all Cats, increase all MDAs 140 feet and LNAV Cat C visibility ¼ mile and Circling Cat C and D visibility ¼ mile. For inoperative MALSR when using Baudette altimeter setting, increase LPV visibility ½ mile all Cats. For inoperative MALSR, increase LPV visibility ½ mile all Cats, inoperative table does not apply to LNAV Cat D. VDP NA when using Baudette altimeter setting. Baro-VNAV NA when using Baudette altimeter setting. Circling to Rwy 4-22 NA at night. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

MALSR (A5)

MISSED APPROACH: Climb to 3300 direct HODEV and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1462-½ 296 (300-½)			
LNAV/VNAV DA	1500-¾ 334 (400-¾)			
LNAV MDA	1500-½ 334 (400-½)			1500-1 334 (400-1)
CIRCLING	1620-1 435 (500-1)	1680-1 495 (500-1)	1680-1½ 495 (500-1½)	1780-2 595 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VORTAC INL	APP CRS	Rwy Idg	7400
111.0	305°	TDZE	1166
Chan 47		Apt Elev	1185

VOR/DME RWY 31

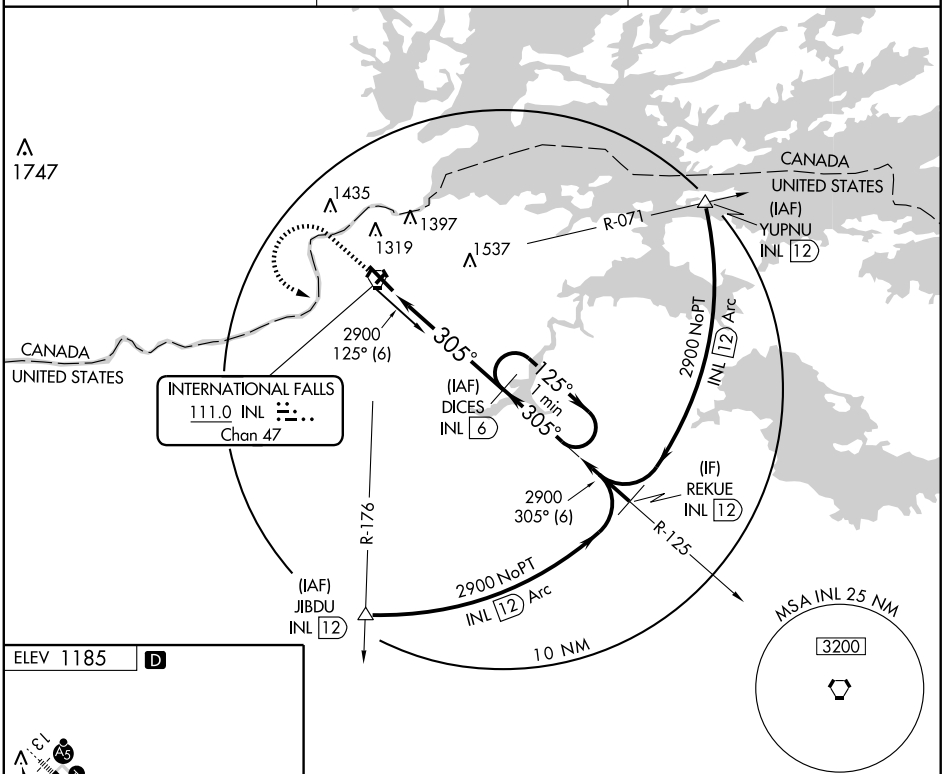
INTERNATIONAL FALLS/FALLS INTL (INL)

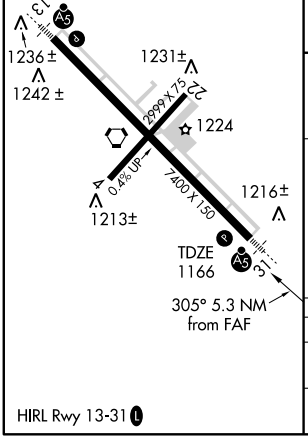
Circling to Rwy 4-22 NA at night.
When local altimeter setting not received, use Baudette altimeter setting and increase all MDAs 140 feet, increase S-31 Cat C and D visibility ¼ mile, and Circling Cat C and D visibility ¼ mile.

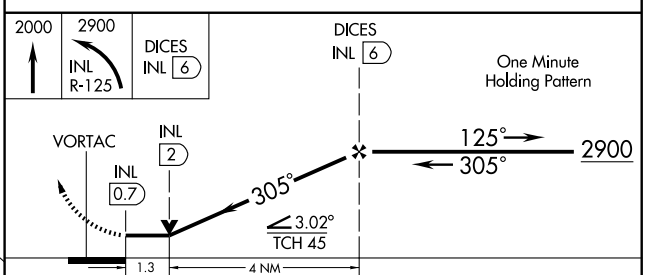
MALSR

MISSED APPROACH: Climb to 2000 then climbing left turn to 2900 via INL VORTAC R-125 to DICES/6 DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF)







CATEGORY	A	B	C	D
S-31	1620-½ 454 (500-½)		1620-¾ 454 (500-¾)	1620-1 454 (500-1)
CIRCLING	1620-1 435 (500-1)	1680-1 495 (500-1)	1680-1½ 495 (500-1½)	1780-2 595 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VORTAC INL 111.0 Chan 47	APP CRS 134°	Rwy Idg 7400 TDZE 1184 Apt Elev 1185

VOR RWY 13

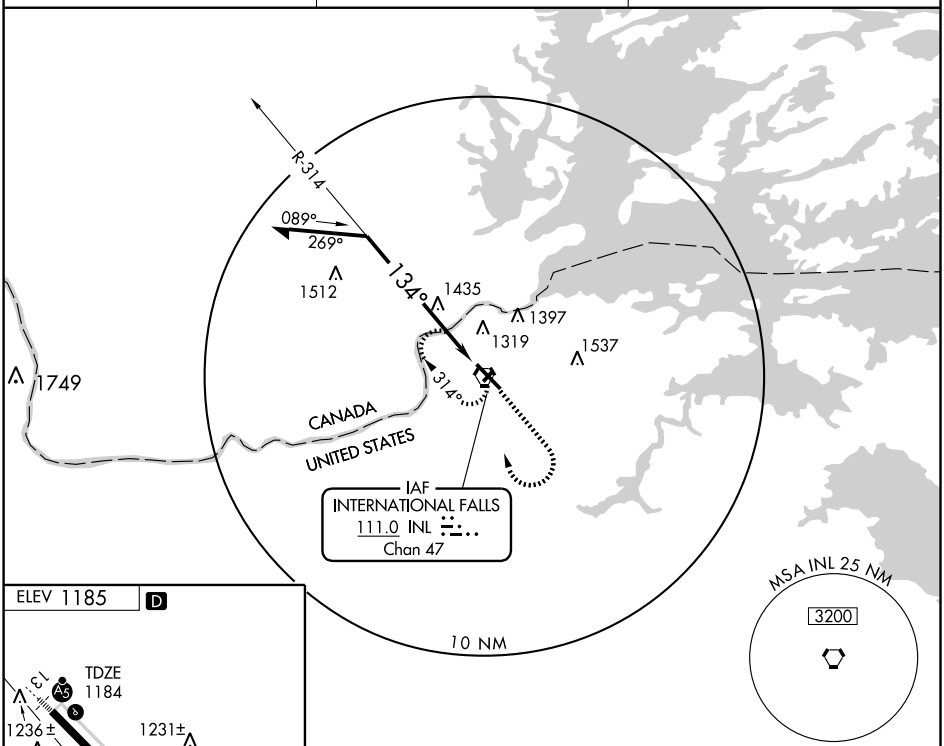
INTERNATIONAL FALLS/FALLS INTL (INL)

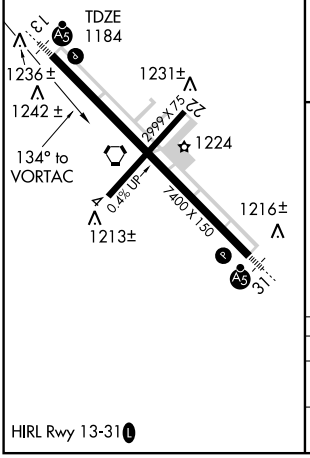
T Circling to Rwy 4-22 NA at night.
A VDP NA when using Baudette altimeter setting.
When local altimeter setting not received, use Baudette altimeter setting and increase all MDAs 140 feet, and S-13 Cats A/B visibility ¼ mile, Cats C/D visibility ½ mile. Increase Circling Cat B visibility ¼ mile, Cat C and D ½ mile. For inoperative MALSR when using Baudette altimeter setting, increase S-13 Cat A visibility ¼ mile.

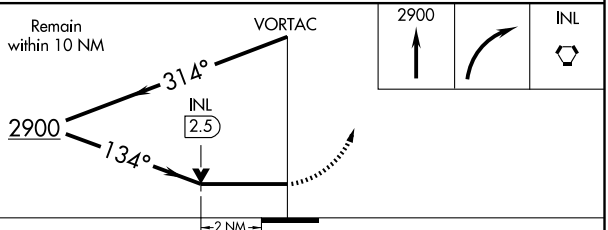
MALSR

MISSED APPROACH: Climb to 2900 then right turn direct INL VORTAC and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-13	1880-½ 696 (700-½)		1880-1½ 696 (700-1½)	1880-1¾ 696 (700-1¾)
CIRCLING	1880-1 695 (700-1)		1880-2 695 (700-2)	1880-2¼ 695 (700-2¼)

HIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VORTAC INL 111.0 Chan 47	APP CRS 303°	Rwy Idg 7400 TDZE 1174 Apt Elev 1185

VOR RWY 31

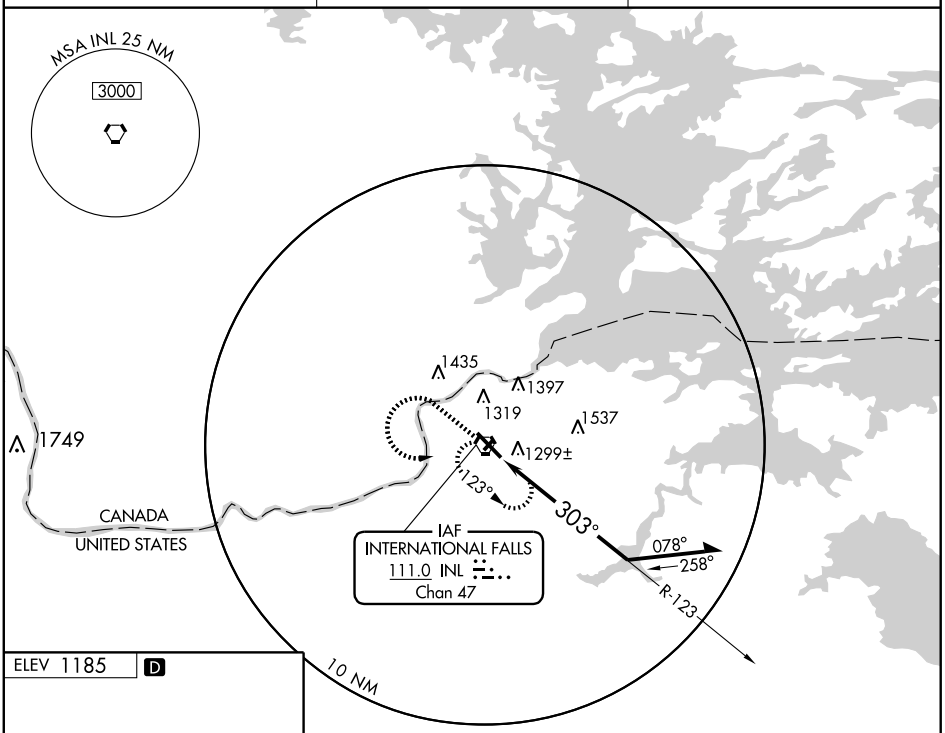
INTERNATIONAL FALLS/FALLS INTL (INL)

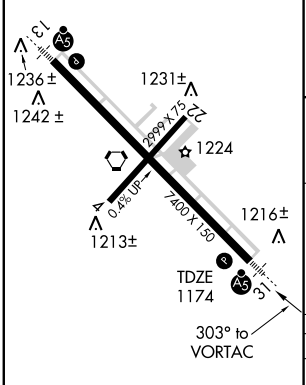
For inoperative MALSR, increase S-31 Cat. D visibility to 1¼. Circling to Rwy 4-22 NA at night.

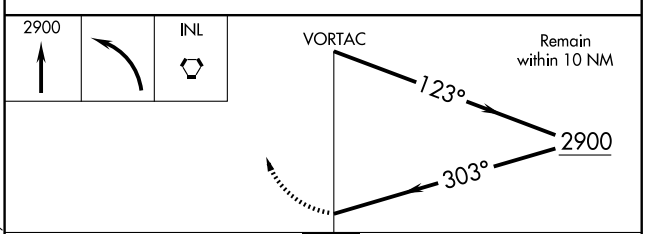
MALSR

MISSED APPROACH: Climb to 2900 then left turn direct INL VORTAC and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
120.0	120.9 377.1	122.8 (CTAF) L



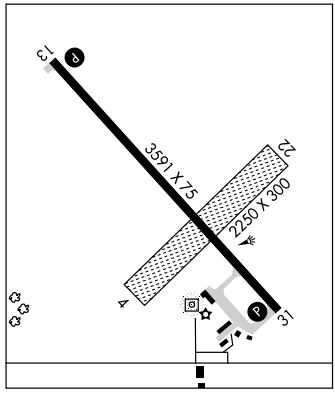




CATEGORY	A	B	C	D
S-31	1600-½ 426 (500-½)		1600-¾ 426 (500-¾)	1600-1 426 (500-1)
CIRCLING	1620-1 435 (500-1)	1680-1 495 (500-1)	1680-1½ 495 (500-1½)	1840-2 655 (700-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

JACKSON MUNI (MJQ) 2 N UTC−6(−5DT) N43°39.00′ W94°59.19′ OMAHA
1446 B S2 **FUEL** 100LL, JET A NOTAM FILE MJQ L–12I
RWY 13–31: H3591X75 (ASPH) S–8, D–10 MIRL 0.4% up SE IAP
RWY 13: REIL. PAPI(P4L). Road.
RWY 31: REIL. PAPI(P4L). Road.
RWY 04–22: 2250X300 (TURF)
RWY 04: P–line.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Fuel avbl 24 hrs with credit card. For svc after hrs call 507–236–6688. Rwy 04–22 CLOSED winter months. Ultralights on and invof arpt. Rwy 04–22 marked with yellow cones. MIRL Rwy 13–31 preset on low ints, to increase ints and ACTIVATE PAPI Rwy 13 and Rwy 31 and REIL Rwy 13 and Rwy 31—CTAF.
WEATHER DATA SOURCES: AWOS–3 353 MJQ (507) 847–5810.
COMMUNICATIONS: CTAF/UNICOM 122.8
MINNEAPOLIS CENTER APP/DEP CON 127.75
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE FRM.
FAIRMONT (L) VOR/DME 110.2 FRM Chan 39 N43°38.76′ W94°25.35′ 264° 24.6 NM to fld. 1164/7E.
NDB/DME (MHW) 353 MJQ Chan 19(Y) N43°38.82′ W94°59.16′ at fld. **AWOS–3** DME chan 19(Y) paired with VHF frequency 108.25. NOTAM FILE MJQ.



JOLLY FISHERMAN SPB (See WAUBUN)

KARLSTAD MUNI (23D) 1 W UTC−6(−5DT) N48°34.75′ W96°32.52′ TWIN CITIES
1025 NOTAM FILE PNM
RWY 17–35: 2606X159 (TURF) LIRL (NSTD)
RWY 17: Tree. **RWY 35:** Road.
AIRPORT REMARKS: Unattended. Rwy 17–35 marked with yellow cones. Twy markers are non–frangible. Rwy 17–35 NSTD LIRL, 400′ between lights.
COMMUNICATIONS: CTAF 122.9

LAC QUI PARLE CO (See MADISON)

LAKE BEMIDJI N47°30.47′ W94°55.40′
(T) VORW/DME 110.05 IDJ Chan 37 at Bemidji Rgnl 1384/4E. Associated with AWOS–3 (BJI).

LAKE ELMO (See ST PAUL)

LAKESIDE N46°50.63′ W92°11.16′ NOTAM FILE DLH GREEN BAY
(H) TACAN LKI (135.4) Chan 11 at Duluth Intl. 1424/5E. Opr Tue–Fri 1300–0400Z‡, Mon and Sat 1300–2200Z‡. No NOTAM MP Thu 1400–1600Z‡. H–2I, L–10G
TACAN azimuth unusable:
140°–165° 265°–272° byd 10 NM blo 5,000′
TACAN unusable:
320°–345° byd 20 NM blo 5,500′
CAUTION—Do not select Chan 73 DLH for Chan 11 LKI. Twr 2049′ on radial 009 Ch 73 DLH.

LAREW N46°27.40′ W94°01.36′ NOTAM FILE BRD. TWIN CITIES
NDB (LOM) 251 BR 232° 5.7 NM to Brainerd Lakes Rgnl. Unmonitored.

LEADERS CLEAR LAKE (See CLEAR LAKE)

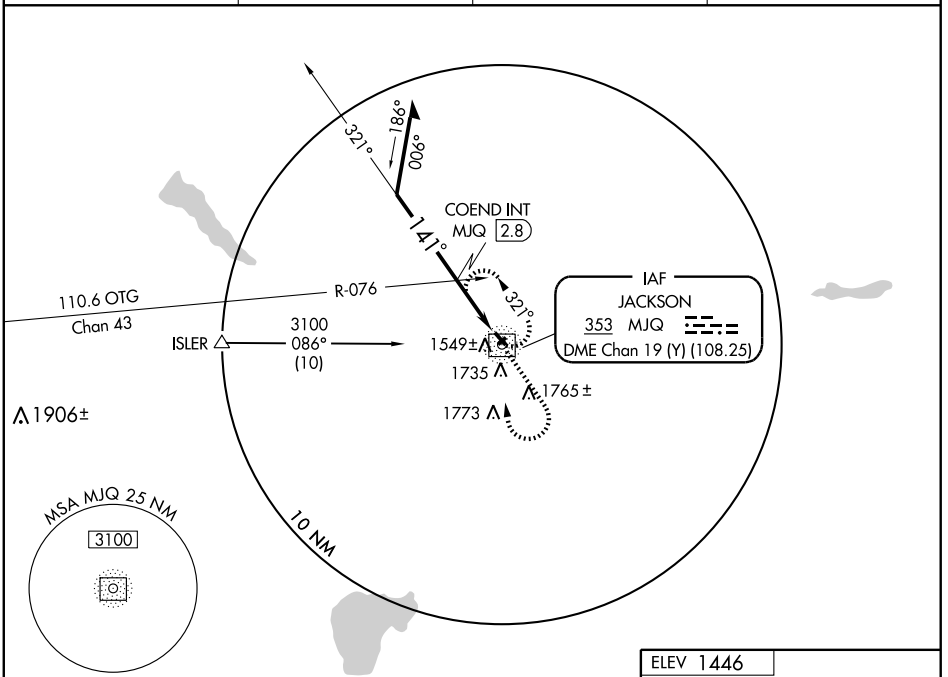
NDB/DME MJQ	APP CRS	Rwy Idg	3591
353	141°	TDZE	1445
DME Chan 19 (Y) (108.25)		Apt Elev	1446

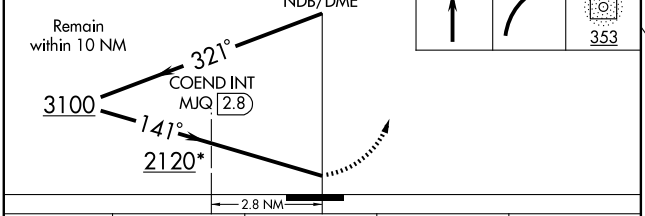
NDB RWY 13
JACKSON MUNI (MJQ)

When local altimeter setting not received, use Estherville altimeter setting and increase all MDAs 60 feet and COEND FIX minimums S-13 visibility Cat C ¼ mile and circling Cat C ¼ mile.

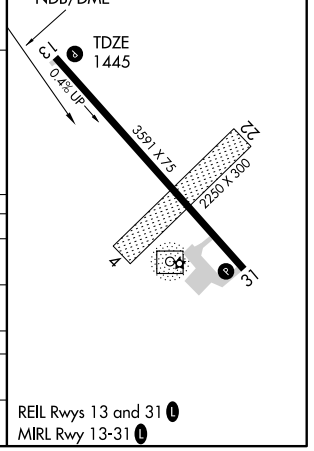
MISSED APPROACH: Climb to 3100 then right turn direct MJQ NDB/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
353	127.75 257.7	121.725	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-13	2120-1	675 (700-1)	2120-2 675 (700-2)	NA
CIRCLING	2120-1	674 (700-1)	2120-2 674 (700-2)	NA
COEND FIX MINIMUMS				
S-13	1940-1	495 (500-1)	1940-1¼ 495 (500-1¼)	NA
CIRCLING	2040-1	594 (600-1)	2040-1½ 594 (600-1½)	NA



NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

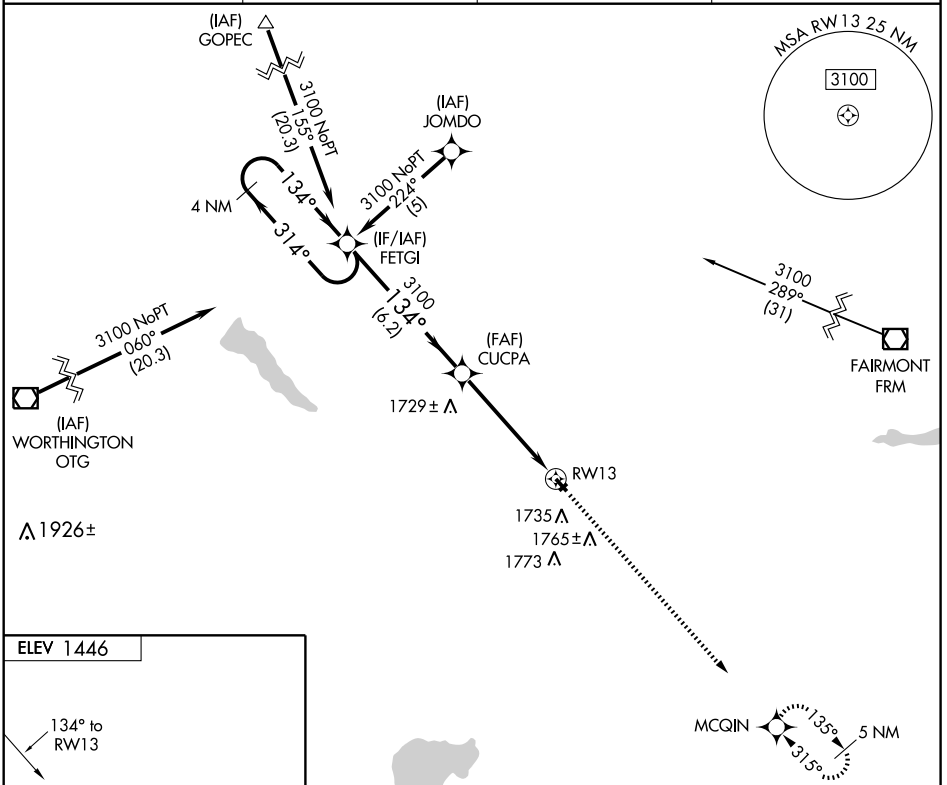
APP CRS	Rwy Idg	3591
134°	TDZE	1445
	Apt Elev	1446

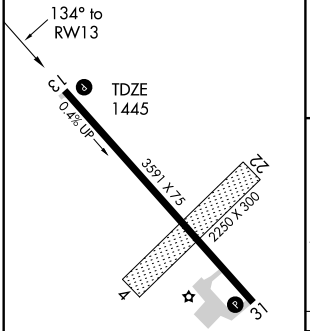
RNAV (GPS) RWY 13
JACKSON MUNI (MJQ)

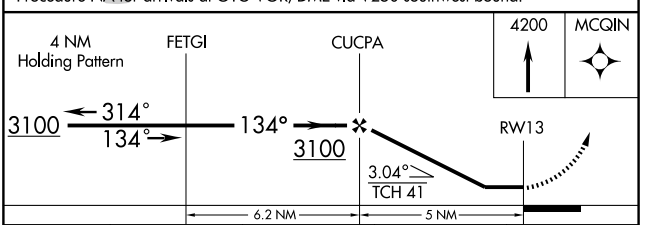
DME/DME RNP -0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Estherville altimeter setting and increase all MDAs 60 feet and visibility Cat C ¼ mile.

MISSED APPROACH: Climb to 4200 direct MCQIN and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
353	127.75 257.7	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1920-1	475 (500-1)	1920-1¼ 475 (500-1¼)	NA
CIRCLING	2040-1	594 (600-1)	2040-1½ 594 (600-1½)	NA

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	3591
314°	TDZE	1445
	Apt Elev	1446

RNAV (GPS) RWY 31

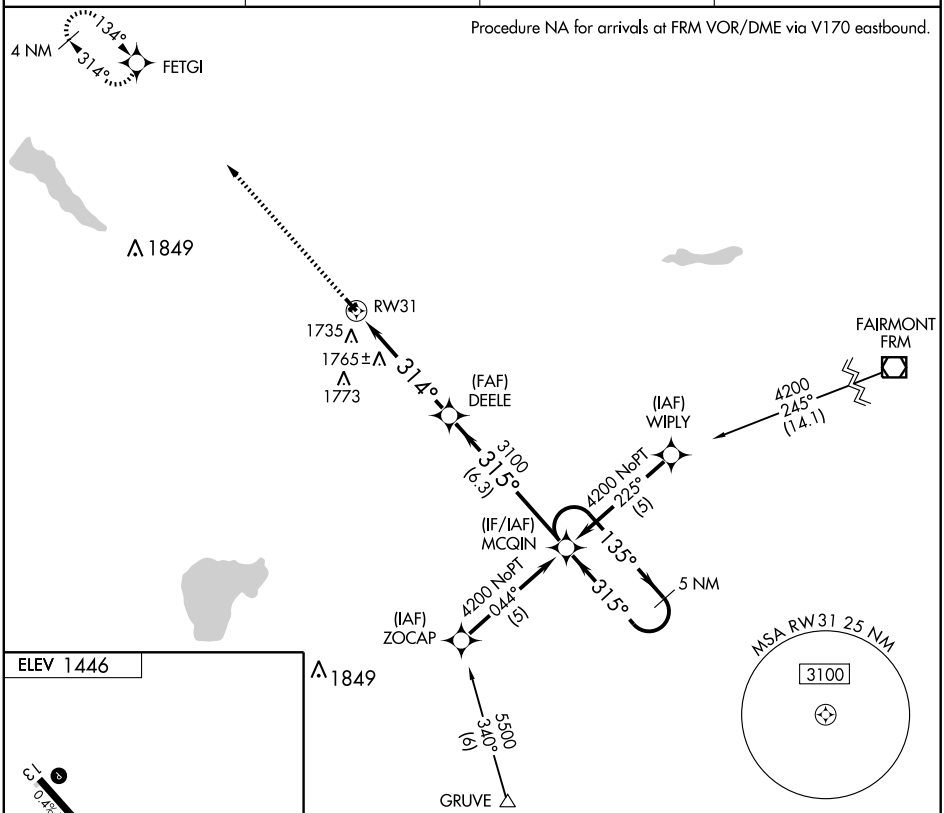
JACKSON MUNI (MJQ)

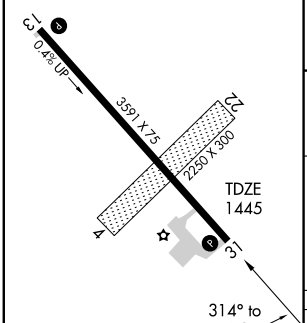
DME/DME RNP -0.3 NA.
When local altimeter setting not received, use Estherville altimeter setting and increase all MDAs 60 feet and visibility Cat C ¼ mile.

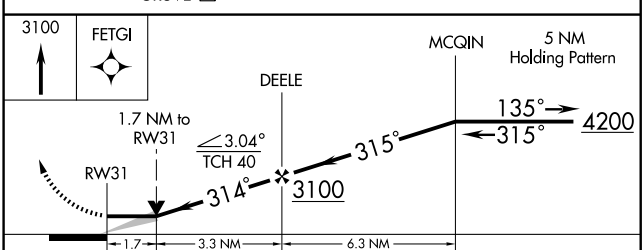
MISSED APPROACH: Climb to 3100 direct FETGI and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
353	127.75 257.7	121.725	122.8 (CTAF) L

Procedure NA for arrivals at FRM VOR/DME via V170 eastbound.







CATEGORY	A	B	C	D
LNAV MDA	2020-1	575 (600-1)	2020-1½ 575 (600-1½)	NA
CIRCLING	2040-1	594 (600-1)	2040-1½ 594 (600-1½)	NA

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LE SUEUR MUNI (12Y) 2 S UTC−6(−5DT) N44°26.25′ W93°54.76′

OMAHA
L–12I, A

868 B **FUEL** 100LL TPA—1668(800) NOTAM FILE PNM

RWY 13–31: H3005X75 (ASPH) MIRL

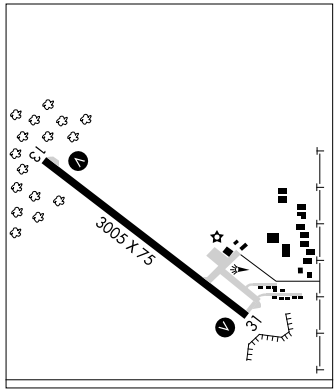
RWY 13: VASI(V2L). Trees. **RWY 31:** VASI(V2L). Trees.

AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Self svc fuel avbl 24 hrs with credit card. ACTIVATE MIRL Rwy 13–31 and VASI Rwy 13 and Rwy 31—122.8.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE MKT.

MANKATO (L) VOR/DME 110.8 MKT Chan 45 N44°13.19′ W93°54.74′ 353° 13.1 NM to fld. 1026/7E.



LINO LAKES

SURFSIDE SPB (8Y4) 2 S UTC−6(−5DT) N45°09.00′ W93°07.01′

TWIN CITIES

880 S4 **FUEL** 100LL TPA—1480(600) NOTAM FILE PNM

WATERWAY NE–SW: 6500X1000 (WATER)

WATERWAY N–S: 5500X1000 (WATER

SEAPLANE REMARKS: Attended May–Oct dawn–dusk, unattended Nov–Apr. S dep make left turnout. Plan apch over Marshan or Baldwin Lakes. 500′ twr 2 miles E right of dep path.

COMMUNICATIONS: CTAF 122.9

LITCHFIELD MUNI (LJF) 2 SE UTC−6(−5DT) N45°05.83′ W94°30.44′

TWIN CITIES
L–12I, 14H
IAP

1140 B **FUEL** 100LL, JET A NOTAM FILE LJF

RWY 13–31: H4002X100 (ASPH) MIRL

RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 42′.

RWY 31: REIL. PAPI(P4L)—GA 3.0° TCH 42′.

AIRPORT REMARKS: Unattended. Self svc fuel avbl 24 hrs. MIRL Rwy 13–31 preset on low ints, to increase ints and ACTIVATE PAPI Rwy 13 and Rwy 31 and REIL Rwy 13 and Rwy 31—CTAF.

WEATHER DATA SOURCES: AWOS–3 109.0 DWN (320) 693–6456.

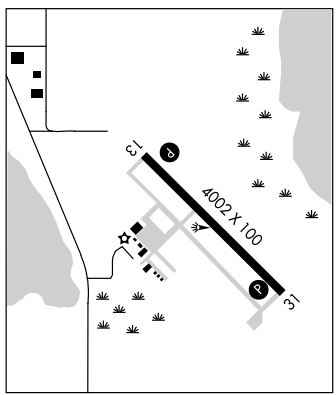
COMMUNICATIONS: CTAF 122.9

DARWIN RCO 122.1R 109.0T (PRINCETON RADIO)

MINNEAPOLIS CENTER APP/DEP CON 125.5.

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

DARWIN (L) VORTAC 109.0 DWN Chan 27 N45°05.25′ W94°27.23′ 277° 2.3 NM to fld. 1130/7E. **AWOS–3.**



WAAS CH 69419 W13A | APP CRS 136° | Rwy Idg 4002 TDZE 1140 Apt Elev 1140

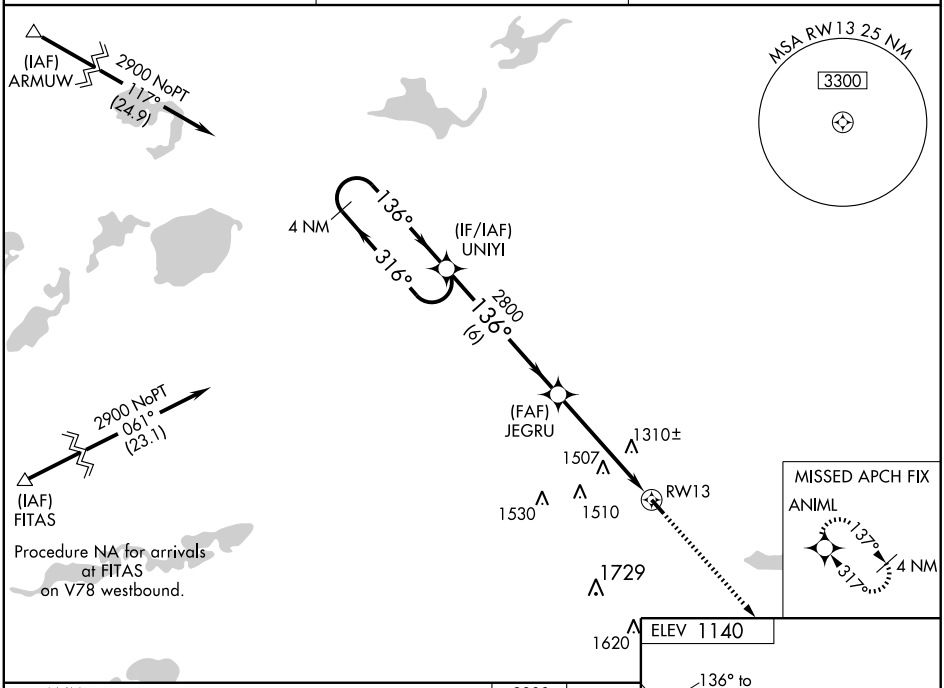
RNAV (GPS) RWY 13

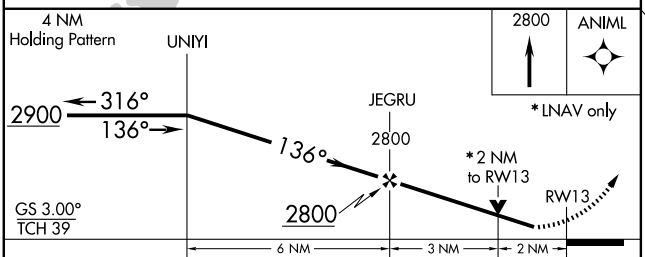
LITCHFIELD MUNI (LJF)

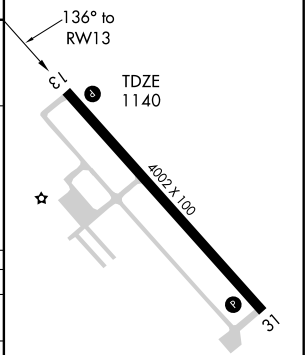
Baro-VNAV NA when using Hutchinson altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Hutchinson altimeter setting and increase all DA 46 feet and all MDA 60 feet, and increase LNAV/VNAV all Cats and Circling visibility Cat D ¼ mile. VDP NA with Hutchinson altimeter setting.

MISSED APPROACH: Climb to 2800 direct ANIML and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
109.0	125.5 323.1	122.9 L







CATEGORY	A	B	C	D
LPV DA	1390-1 250 (300-1)			
LNAV/VNAV DA	1934-2¾ 794 (800-2¾)			
LNAV MDA	1820-1 680 (700-1)		1820-2 680 (700-2)	1820-2¼ 680 (700-2¼)
CIRCLING	1820-1 680 (700-1)		1820-2 680 (700-2)	1860-2¼ 720 (800-2¼)

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS CH 40319 W31A | APP CRS 317° | Rwy Idg 4002 | TDZE 1140 | Apt Elev 1140

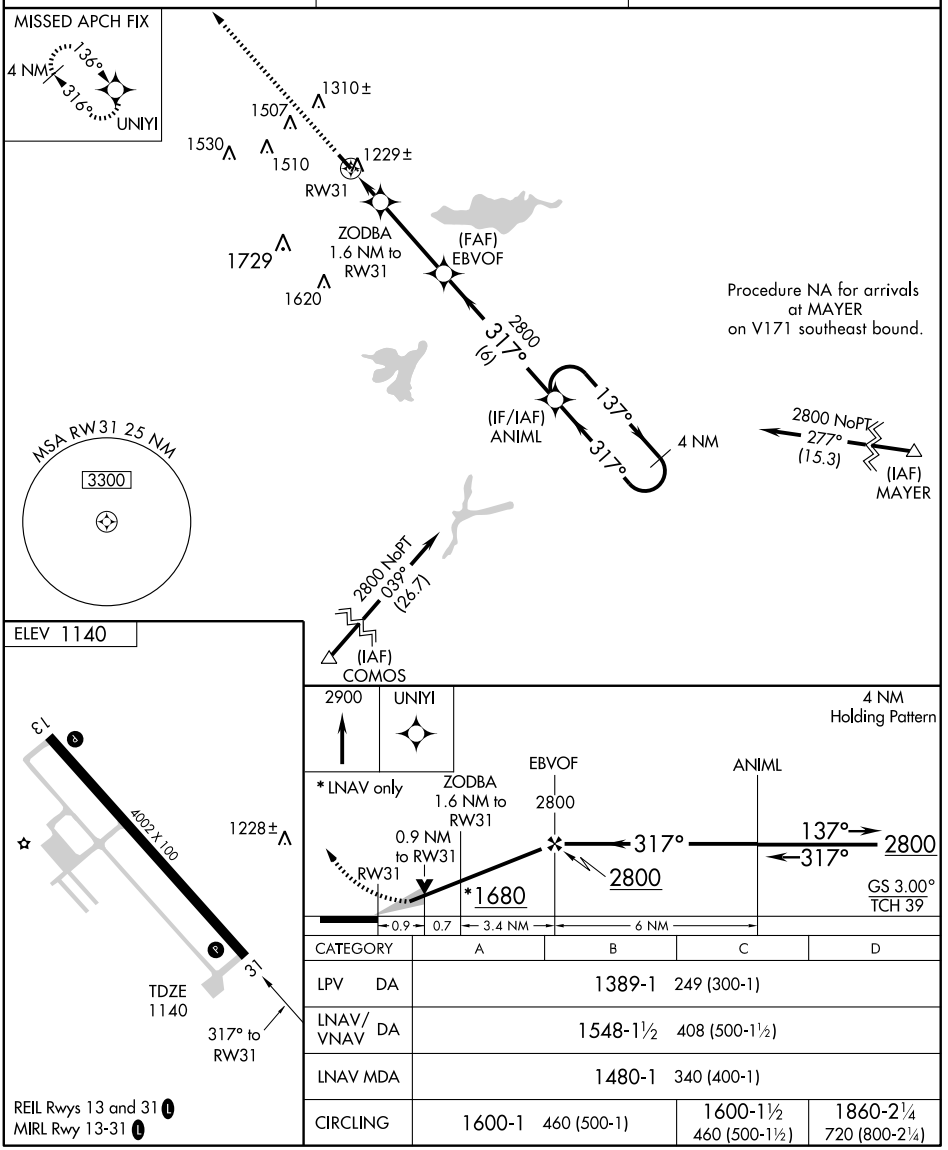
RNAV (GPS) RWY 31

LITCHFIELD MUNI (LJF)

Baro-VNAV NA when using Hutchinson altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Hutchinson altimeter setting and increase all DA 46 feet and all MDA 60 feet, and increase LNAV and Circling visibility Cat D ¼ mile. VDP NA when using Hutchinson altimeter setting.

MISSED APPROACH: Climb to 2900 direct UNIYI and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
109.0	125.5 323.1	122.9 (L)



CATEGORY	A	B	C	D
LPV DA	1389-1 249 (300-1)			
LNAV/VNAV DA	1548-1½ 408 (500-1½)			
LNAV MDA	1480-1 340 (400-1)			
CIRCLING	1600-1 460 (500-1)		1600-1½ 460 (500-1½)	1860-2¼ 720 (800-2¼)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VORTAC DWN	APP CRS	Rwy Idg	N/A
109.0	277°	TDZE	N/A
Chan 27		Apt Elev	1140

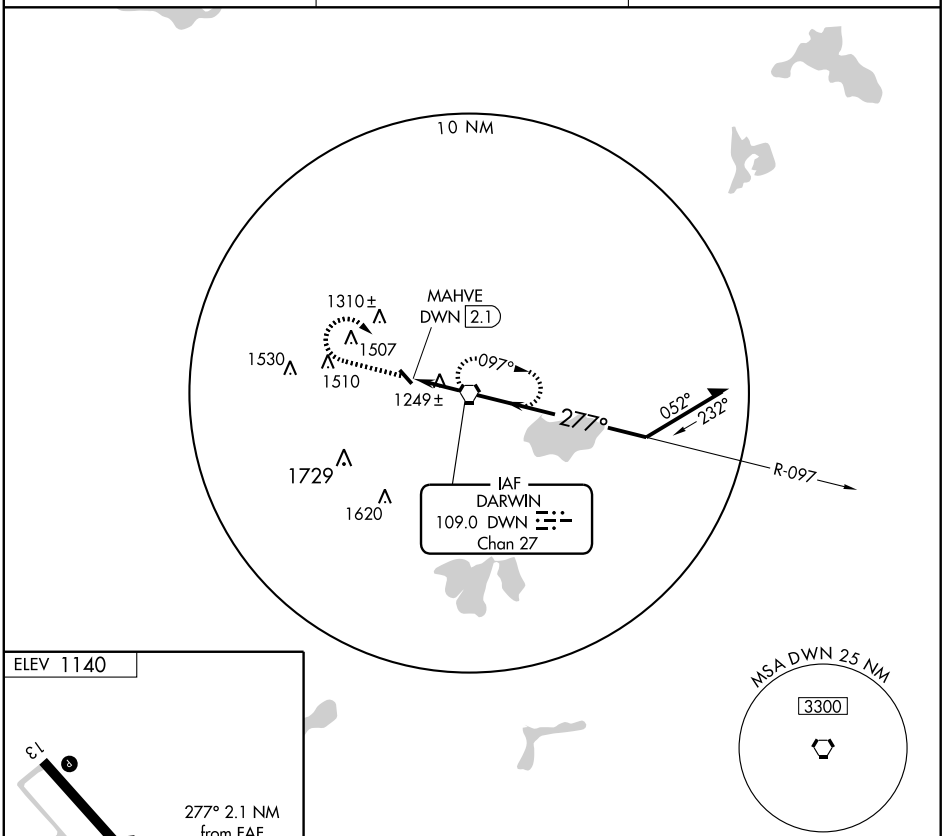
VOR-A

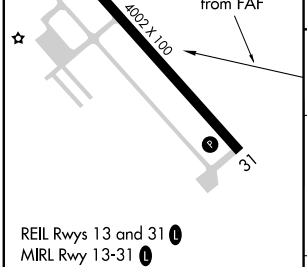
LITCHFIELD MUNI (LJF)

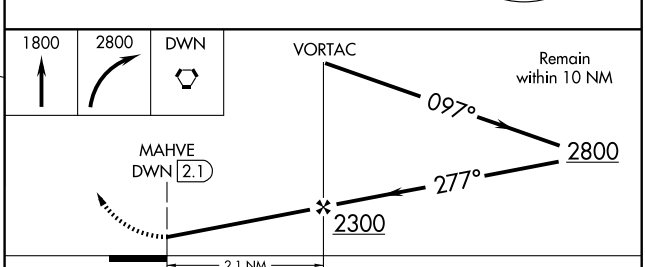
T A When local altimeter setting not received, use Hutchinson altimeter setting and increase all MDA 60 feet, and increase visibility Circling Cat D ¼ mile.

MISSED APPROACH: Climb to 1800 then climbing right turn to 2800 direct DWN VORTAC and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
109.0	125.5 323.1	122.9 L







FAF to MAP 2.1 NM					
Knots	60	90	120	150	180
Min:Sec	2:06	1:24	1:03	0:50	0:42

CATEGORY	A	B	C	D
CIRCLING	1600-1 460 (500-1)		1600-1½ 460 (500-1½)	1860-2¼ 720 (800-2¼)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

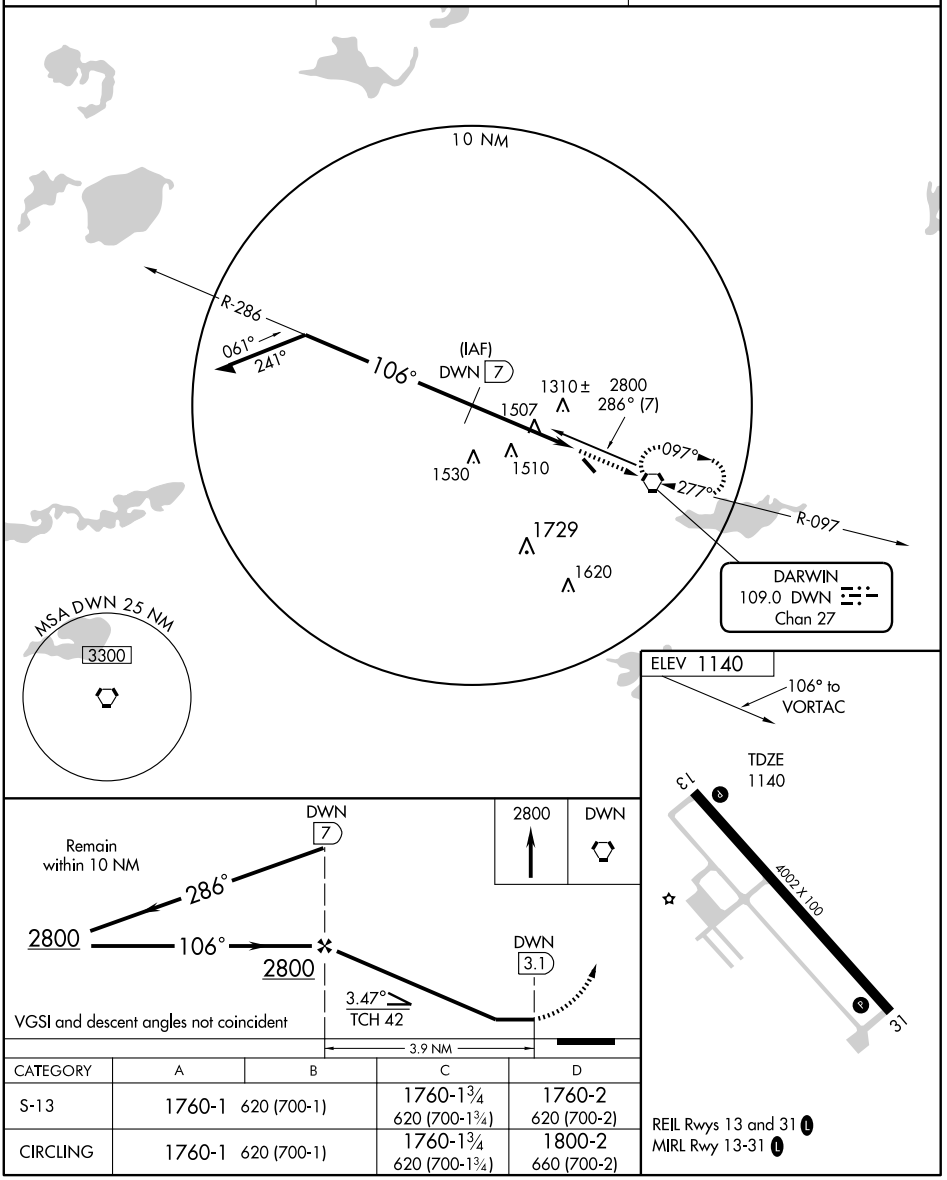
VORTAC DWN	APP CRS	Rwy Idg	4002
109.0	106°	TDZE	1140
Chan 27		Apt Elev	1140

VOR/DME RWY 13

LITCHFIELD MUNI (LJF)

MISSED APPROACH: Climb to 2800 direct DWN VORTAC and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
109.0	125.5 323.1	122.9 (L)



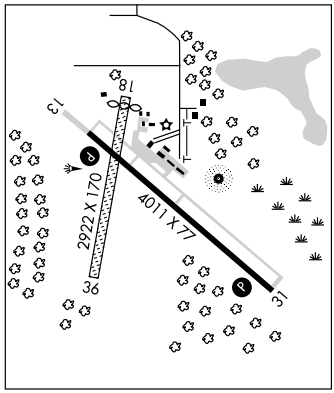
CATEGORY	A	B	C	D
S-13	1760-1 620 (700-1)		1760-1¾ 620 (700-1¾)	1760-2 620 (700-2)
CIRCLING	1760-1 620 (700-1)		1760-1¾ 620 (700-1¾)	1800-2 660 (700-2)

REIL Rwys 13 and 31 (L)
MIRL Rwy 13-31 (L)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LITTLE FALLS/MORRISON CO, CHARLES A LINDBERGH FLD (LXL) 2 S UTC−6(−5DT) TWIN CITIES
N45°56.97′ W94°20.82′ L–14H
1123 B **FUEL** 100LL NOTAM FILE LXL IAP

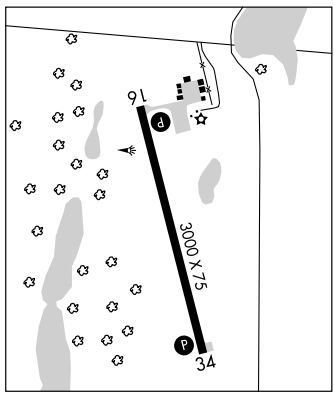
RWY 13–31: H4011X77 (ASPH) S–22, D–42 MIRL
RWY 13: REIL. PAPI(P4R)—GA 3.0° TCH 25′.
RWY 31: REIL. PAPI(P4L)—GA 3.0° TCH 25′.
RWY 18–36: 2922X170 (TURF) 0.3% up N
RWY 18: Thld dsplcd 203′. Trees. **RWY 36:** Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Fuel avbl 24 hrs with credit card. Rwy 18–36 CLOSED winter months. Avoid mink ranch dep Rwy 36; ranch is ½ mile NE of rwy. Additional 500′ off NW end Rwy 13–31 marked unusable. Rwy 18–36 and dsplcd thld marked with yellow cones. ACTIVATE MIRL Rwy 13–31, REIL Rwy 13 and Rwy 31 and PAPI Rwy 13 and Rwy 31—CTAF.
WEATHER DATA SOURCES: AWOS–3 359 LXL (320) 632–6791.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 118.05
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE BRD.
BRAINERD (H) VORTACW 116.9 BRD Chan 116 N46°20.89′ W94°01.55′ 206° 27.4 NM to fld. 1260/3E.
NDB (MHW) 359 LXL N45°57.01′ W94°20.50′ at fld.
AWOS–3. NOTAM FILE LXL. Unmonitored.



LITTLEFORK MUNI/HANOVER (13Y) 2 NW UTC−6(−5DT) N48°25.00′ W93°35.18′ TWIN CITIES
1145 NOTAM FILE PNM
RWY 09–27: 3000X150 (TURF)
RWY 09: Trees. **RWY 27:** Trees.
AIRPORT REMARKS: Unattended. Arpt CLOSED winter months. Ultralight tfc on and invof arpt. Antenna +25′, 500′ SE of rwy, marked and lgtd. Rwy 09–27 marked with yellow cones.
COMMUNICATIONS: CTAF 122.9

LONG PRAIRIE

TODD FLD (14Y) 4 S UTC−6(−5DT) N45°53.90′ W94°52.43′ TWIN CITIES
1333 B **FUEL** 100LL NOTAM FILE 14Y L–14H
RWY 16–34: H3000X75 (ASPH) MIRL IAP
RWY 16: REIL. PAPI(P4L)—GA 3.0° TCH 23′.
RWY 34: REIL. PAPI(P4L)—GA 3.0° TCH 23′.
AIRPORT REMARKS: Unattended. For fuel call 320–732–3827/766–4717. Ultralights on and invof arpt. ACTIVATE MIRL Rwy 16–34, PAPI Rwy 16 and Rwy 34 and REIL Rwy 16 and Rwy 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.650 (320) 732–3508.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 126.1
RADIO AIDS TO NAVIGATION: NOTAM FILE AXN.
ALEXANDRIA (L) VORW/DME 112.8 AXN Chan 75 N45°57.50′ W95°13.96′ 096° 15.5 NM to fld. 1367/7E. **HIWAS.**



APP CRS	Rwy Idg	4011
308°	TDZE	1122
	Apt Elev	1122

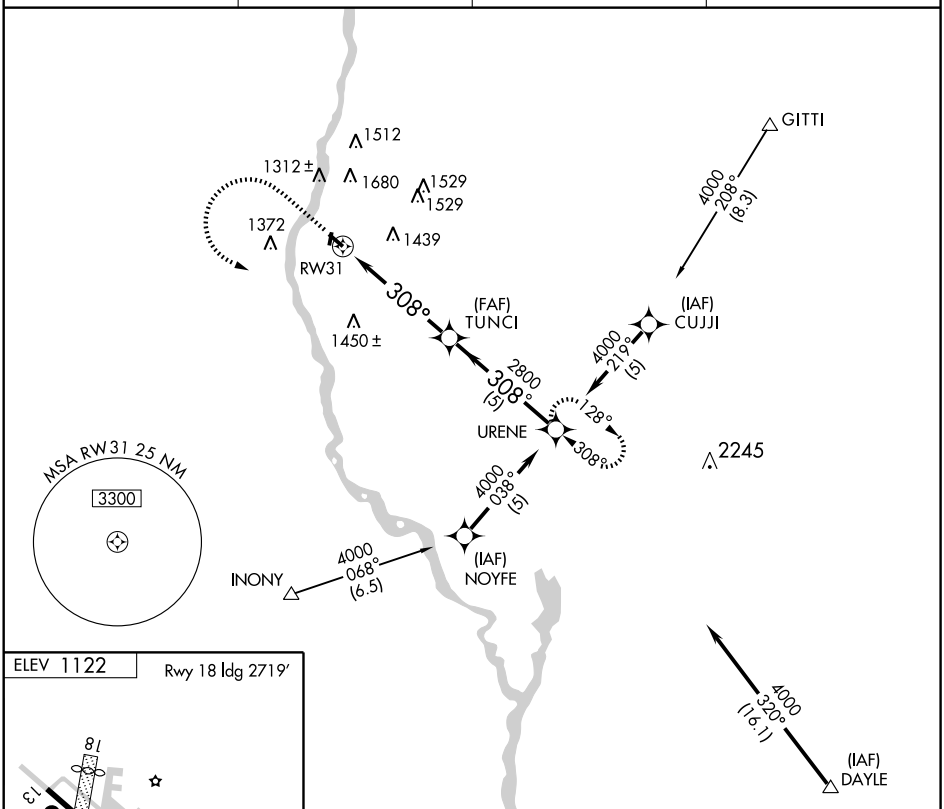
GPS RWY 31

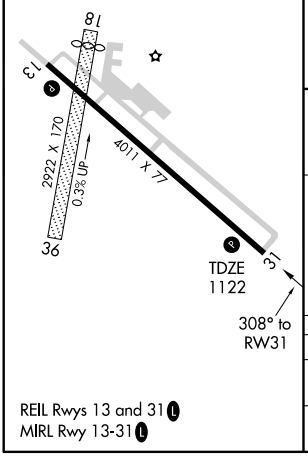
LITTLE FALLS/MORRISON COUNTY, CHARLES A. LINDBERGH FIELD (LXL)

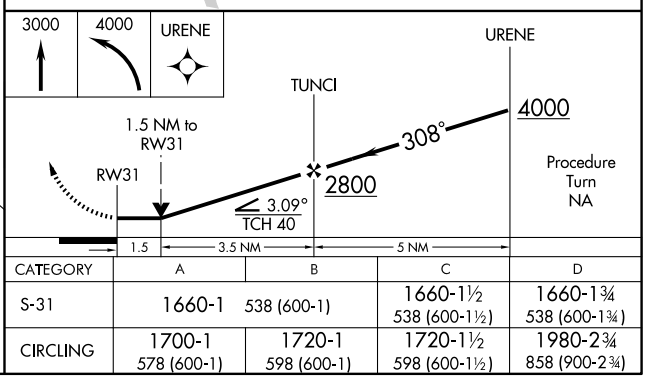
T
A NA

MISSED APPROACH: Climb to 3000 then climbing left turn to 4000 direct URENE WP and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
359	118.05 239.0	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-31	1660-1	538 (600-1)	1660-1½ 538 (600-1½)	1660-1¾ 538 (600-1¾)
CIRCLING	1700-1 578 (600-1)	1720-1 598 (600-1)	1720-1½ 598 (600-1½)	1980-2¾ 858 (900-2¾)

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

NDB LXL	APP CRS	Rwy Idg	4011
359	312°	TDZE	1122
		Apt Elev	1122

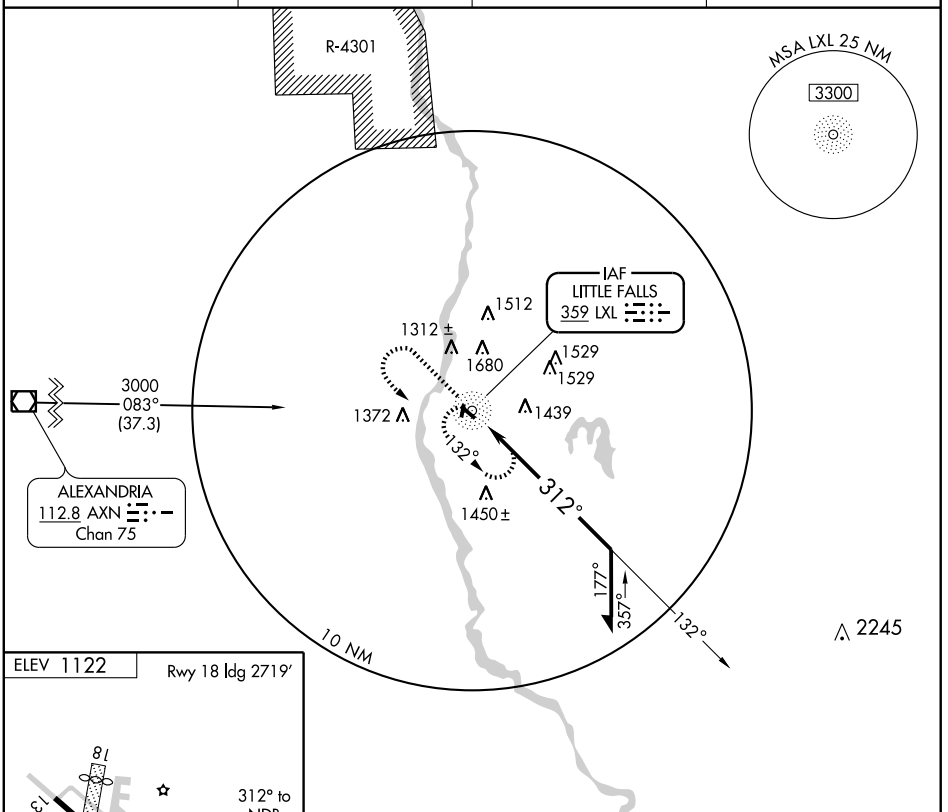
NDB RWY 31

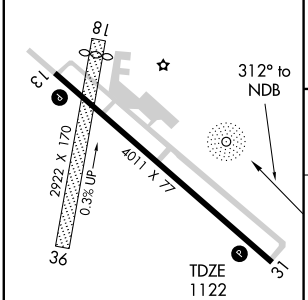
LITTLE FALLS/MORRISON COUNTY, CHARLES A. LINDBERGH FIELD (LXL)

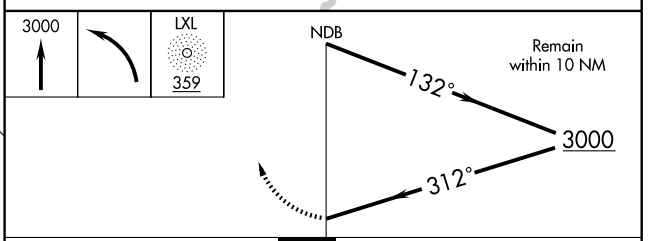
T
NA

MISSED APPROACH: Climb to 3000 then left turn direct LXL NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
359	118.05 239.0	121.725	122.8 (CTAF) L







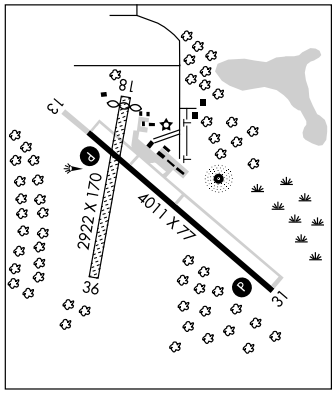
CATEGORY	A	B	C	D
S-31	1840-1	718 (800-1)	1840-2 718 (800-2)	1840-2¼ 718 (800-2¼)
CIRCLING	1840-1	718 (800-1)	1840-2 718 (800-2)	1980-2¾ 858 (900-2¾)

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LITTLE FALLS/MORRISON CO, CHARLES A LINDBERGH FLD (LXL) 2 S UTC−6(−5DT) TWIN CITIES
N45°56.97′ W94°20.82′ L–14H
1123 B **FUEL** 100LL NOTAM FILE LXL IAP

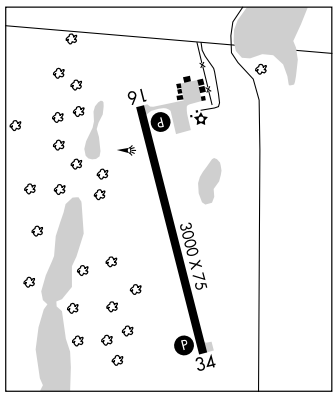
RWY 13–31: H4011X77 (ASPH) S–22, D–42 MIRL
RWY 13: REIL. PAPI(P4R)—GA 3.0° TCH 25′.
RWY 31: REIL. PAPI(P4L)—GA 3.0° TCH 25′.
RWY 18–36: 2922X170 (TURF) 0.3% up N
RWY 18: Thld dsplcd 203′. Trees. **RWY 36:** Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Fuel avbl 24 hrs with credit card. Rwy 18–36 CLOSED winter months. Avoid mink ranch dep Rwy 36; ranch is ½ mile NE of rwy. Additional 500′ off NW end Rwy 13–31 marked unusable. Rwy 18–36 and dsplcd thld marked with yellow cones. ACTIVATE MIRL Rwy 13–31, REIL Rwy 13 and Rwy 31 and PAPI Rwy 13 and Rwy 31—CTAF.
WEATHER DATA SOURCES: AWOS–3 359 LXL (320) 632–6791.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 118.05
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE BRD.
BRAINERD (H) VORTACW 116.9 BRD Chan 116 N46°20.89′ W94°01.55′ 206° 27.4 NM to fld. 1260/3E.
NDB (MHW) 359 LXL N45°57.01′ W94°20.50′ at fld.
AWOS–3. NOTAM FILE LXL. Unmonitored.



LITTLEFORK MUNI/HANOVER (13Y) 2 NW UTC−6(−5DT) N48°25.00′ W93°35.18′ TWIN CITIES
1145 NOTAM FILE PNM
RWY 09–27: 3000X150 (TURF)
RWY 09: Trees. **RWY 27:** Trees.
AIRPORT REMARKS: Unattended. Arpt CLOSED winter months. Ultralight tfc on and invof arpt. Antenna +25′, 500′ SE of rwy, marked and lgtd. Rwy 09–27 marked with yellow cones.
COMMUNICATIONS: CTAF 122.9

LONG PRAIRIE

TODD FLD (14Y) 4 S UTC−6(−5DT) N45°53.90′ W94°52.43′ TWIN CITIES
1333 B **FUEL** 100LL NOTAM FILE 14Y L–14H
RWY 16–34: H3000X75 (ASPH) MIRL IAP
RWY 16: REIL. PAPI(P4L)—GA 3.0° TCH 23′.
RWY 34: REIL. PAPI(P4L)—GA 3.0° TCH 23′.
AIRPORT REMARKS: Unattended. For fuel call 320–732–3827/766–4717. Ultralights on and invof arpt. ACTIVATE MIRL Rwy 16–34, PAPI Rwy 16 and Rwy 34 and REIL Rwy 16 and Rwy 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.650 (320) 732–3508.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 126.1
RADIO AIDS TO NAVIGATION: NOTAM FILE AXN.
ALEXANDRIA (L) VORW/DME 112.8 AXN Chan 75 N45°57.50′ W95°13.96′ 096° 15.5 NM to fld. 1367/7E. **HIWAS.**



APP CRS	Rwy Idg	3000
344°	TDZE	1332
	Apt Elev	1333

RNAV (GPS) RWY 34

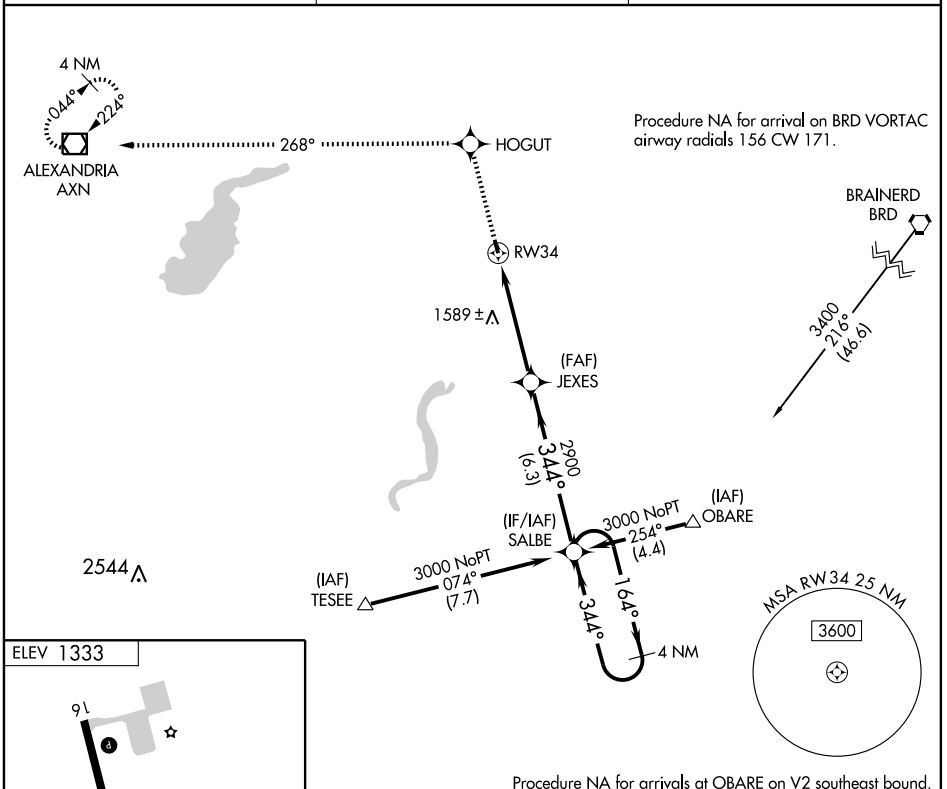
LONG PRAIRIE/ TODD FIELD (14Y)

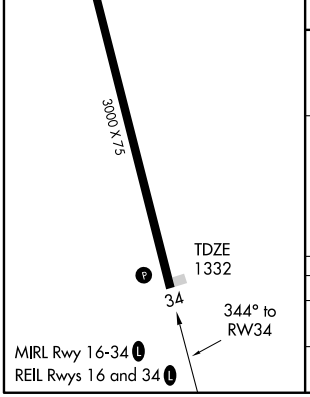
T
NA

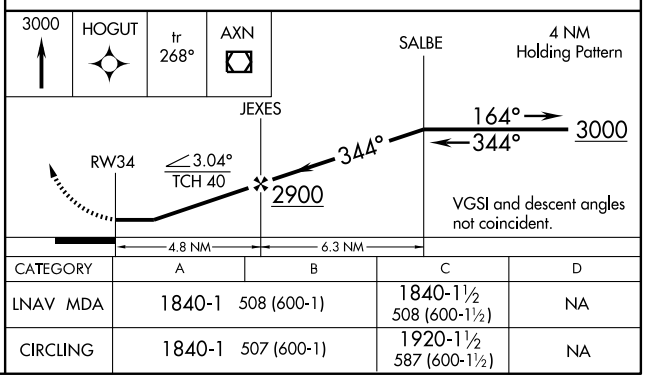
DME/DME RNP-0.3 NA. Procedure NA at night. Visibility reduction by helicopters NA. When local altimeter setting not received, use Alexandria altimeter setting and increase all MDA 80 feet and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct HOGUT and via track 268° to AXN VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.650	126.1 269.2	122.9 L







CATEGORY	A	B	C	D
LNAV MDA	1840-1	508 (600-1)	1840-1½ 508 (600-1½)	NA
CIRCLING	1840-1	507 (600-1)	1920-1½ 587 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LONGVILLE MUNI (XVG) 1 NE UTC−6(−5DT) N46°59.40′ W94°12.22′ TWIN CITIES

1334 B **FUEL** 100LL NOTAM FILE XVG L–14H

RWY 13–31: H3560X75 (ASPH) S–9, D–14 MIRL IAP

RWY 13: PAPI(P4L)—GA 4.0° TCH 20′. Thld dsplcd 450′. Trees.

RWY 31: PAPI(P4L)—GA 3.0° TCH 20′. Trees.

AIRPORT REMARKS: Unattended. Self serve fuel avbl 24 hrs. Ultralights on and invof arpt. Deer and birds on and invof arpt. ACTIVATE MIRL Rwy 13–31, PAPI Rwy 13 and Rwy 31—CTAF.

WEATHER DATA SOURCES: AWOS–3 392 XVG (218) 363–3347.

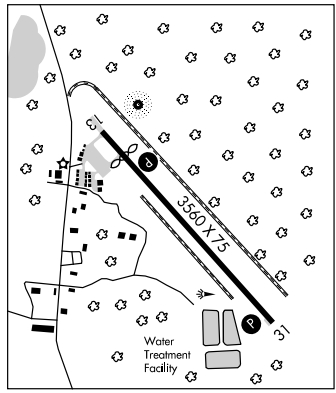
COMMUNICATIONS: CTAF 122.9

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 118.05

RADIO AIDS TO NAVIGATION: NOTAM FILE GPZ.

GRAND RAPIDS (L) VORW/DME 111.4 GPZ Chan 51 N47°09.82′ W93°29.31′ 245° 31.1 NM to fld. 1400/6E.

NDB(MHW) 392 XVG N46°59.66′ W94°12.39′ at fld. **AWOS–3**. NOTAM FILE XVG.



LUVERNE

QUENTIN AANENSON FLD (LYV) 2 S UTC−6(−5DT) N43°37.01′ W96°13.06′ OMAHA

1435 B **FUEL** 100LL NOTAM FILE LYV L–12I

RWY 18–36: H4200X75 (ASPH) S–17, D–23 MIRL 0.3% up N. IAP

RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 28′. P–line.

RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 28′. Road.

AIRPORT REMARKS: Attended Mon–Fri 1300–2300Z‡. 24 hr self svc credit fuel avbl. Rwy lighting operates continuously from dusk–dawn on lowest setting. Increase via CTAF. ACTIVATE PAPI Rwy 18 and Rwy 36 and REIL Rwy 18 and Rwy 36, MIRL Rwy 18–36—CTAF.

WEATHER DATA SOURCES: AWOS–3 119.825 (507) 283–5027.

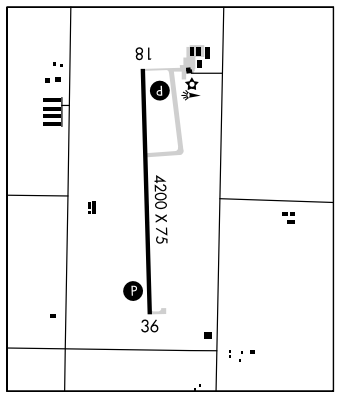
COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ **SIOUX FALLS APP/DEP CON** 125.8 (1100–0600Z‡) other times ctc.

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.05

RADIO AIDS TO NAVIGATION: NOTAM FILE FSD.

SIOUX FALLS (H) VORTACW 115.0 FSD Chan 97 N43°38.97′ W96°46.87′MN 085° 24.6 NM to fld. 1570/9E. **HIWAS**



MADISON

LAC QUI PARLE CO (DXX) 2 SE UTC−6(−5DT) N44°59.19′ W96°10.67′ TWIN CITIES

1082 B S4 **FUEL** 100LL NOTAM FILE DXX L–12I, 14H

RWY 13–31: H3301X75 (ASPH) MIRL IAP

RWY 13: PAPI(P4L). **RWY 31:** PAPI(P4L).

RWY 08–26: 3033X135 (TURF)

AIRPORT REMARKS: Attended Mon–Sat 1400–0100Z‡. Unattended Sun; for svc call 320–598–7966. Self svc fuel. For airframe and power plant repairs call 320–598–3467. Rwy 08–26 not plowed winter months. Rwy 08–26 marked with yellow cones. ACTIVATE MIRL Rwy 13–31 and PAPI Rwy 13 and Rwy 31—CTAF.

WEATHER DATA SOURCES: AWOS–3 341 DXX (320) 598–3863

COMMUNICATIONS: CTAF/UNICOM 122.8

RCO 122.3 (PRINCETON RADIO)

MINNEAPOLIS CENTER APP/DEP CON 128.5

RADIO AIDS TO NAVIGATION: NOTAM FILE MVE.

MONTEVIDEO (T) VORW/DME 111.6 MVE Chan 53 N44°58.36′ W95°42.72′ 268° 19.9 NM to fld. 1034/5E. Unmonitored.

DAWSON–MADISON NDB (MHW) 341 DXX N44°59.05′ W96°10.75′ at fld. **AWOS–3**. NOTAM FILE DXX.

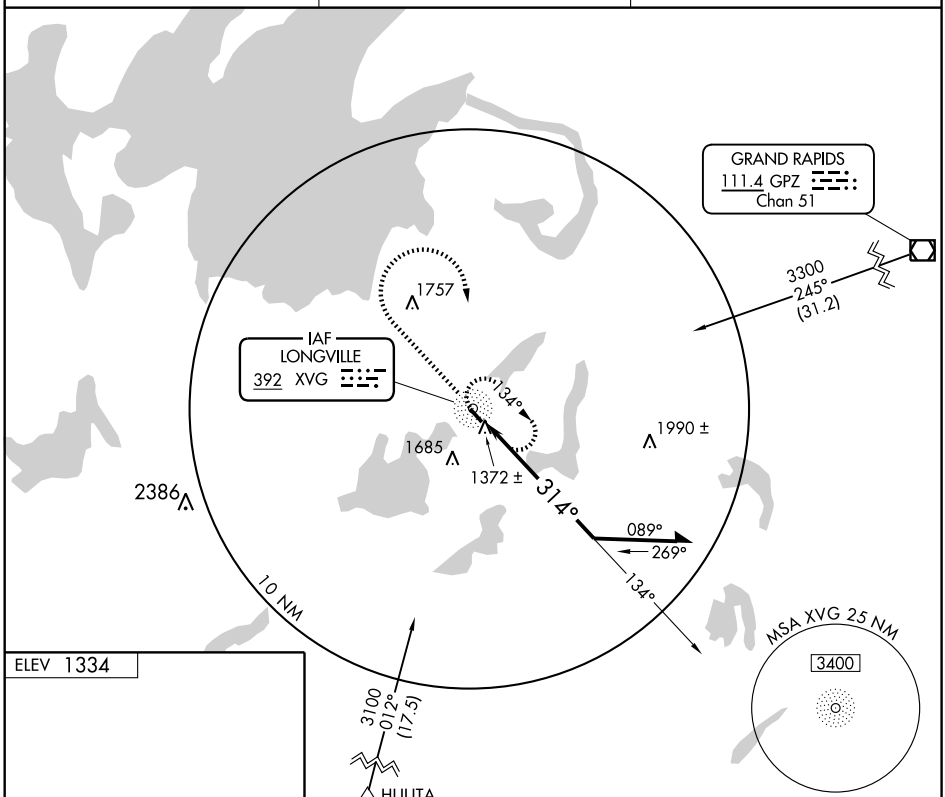
NDB XVG 392	APP CRS 314°	Rwy Idg 3560 TDZE 1332 Apt Elev 1334

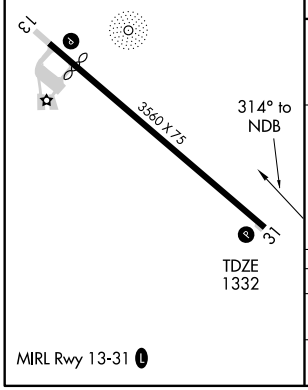
NDB RWY 31
LONGVILLE MUNI (XVG)

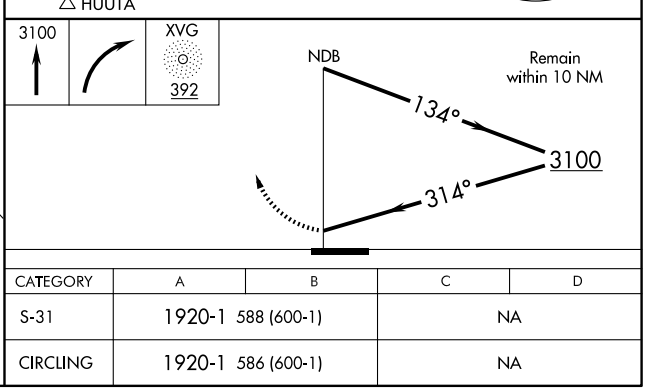
NA

MISSED APPROACH: Climb to 3100 then right turn direct XVG NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
392	118.05 239.0	122.9 L







CATEGORY	A	B	C	D
S-31	1920-1 588 (600-1)		NA	
CIRCLING	1920-1 586 (600-1)		NA	

NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 31

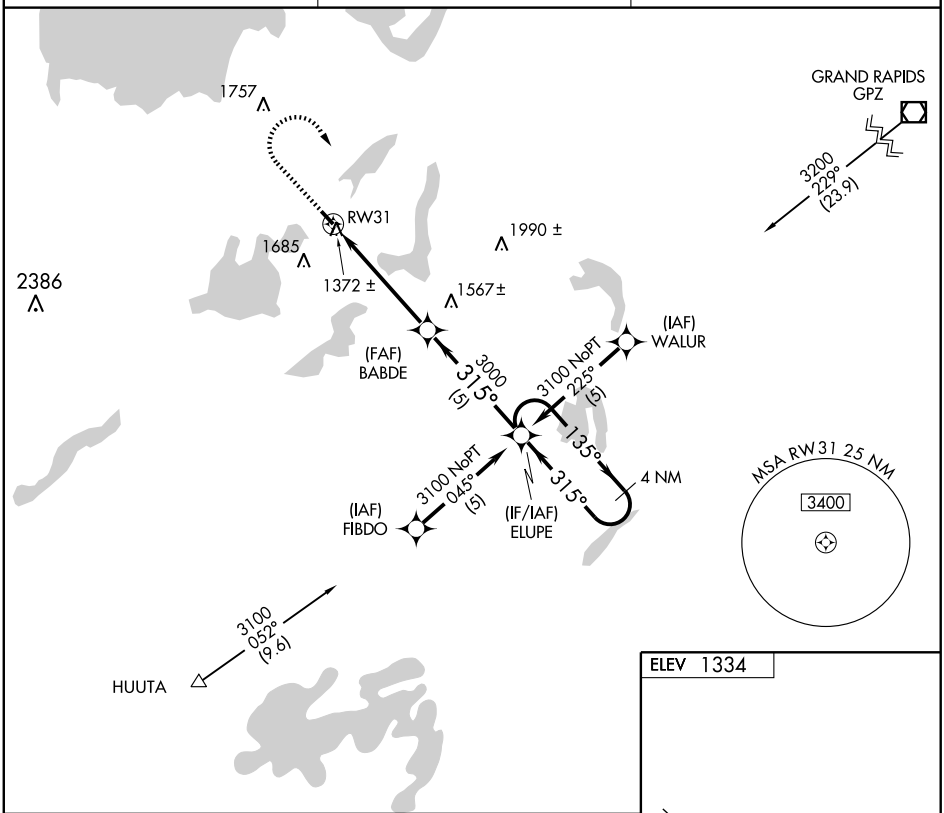
LONGVILLE MUNI (XVG)

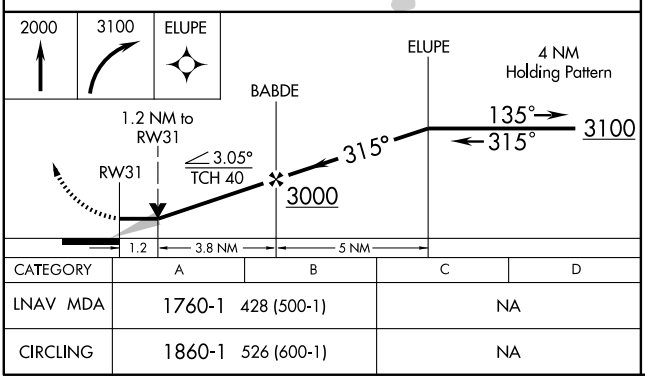
APP CRS		
315°	Rwy Idg	3560
	TDZE	1332
	Apt Elev	1334

NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA

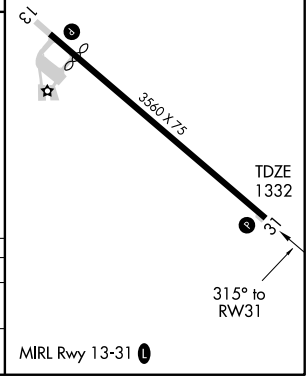
MISSED APPROACH: Climb to 2000 then climbing right turn to 3100 direct ELUPE WP and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
392	118.05 239.0	122.9 L





CATEGORY	A	B	C	D
LNAV MDA	1760-1	428 (500-1)	NA	
CIRCLING	1860-1	526 (600-1)	NA	



NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

LONGVILLE MUNI (XVG) 1 NE UTC−6(−5DT) N46°59.40′ W94°12.22′ TWIN CITIES

1334 B **FUEL** 100LL NOTAM FILE XVG L–14H

RWY 13–31: H3560X75 (ASPH) S–9, D–14 MIRL IAP

RWY 13: PAPI(P4L)—GA 4.0° TCH 20′. Thld dsplcd 450′. Trees.

RWY 31: PAPI(P4L)—GA 3.0° TCH 20′. Trees.

AIRPORT REMARKS: Unattended. Self serve fuel avbl 24 hrs. Ultralights on and invof arpt. Deer and birds on and invof arpt. ACTIVATE MIRL Rwy 13–31, PAPI Rwy 13 and Rwy 31—CTAF.

WEATHER DATA SOURCES: AWOS–3 392 XVG (218) 363–3347.

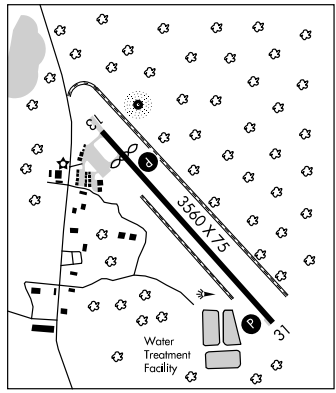
COMMUNICATIONS: CTAF 122.9

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 118.05

RADIO AIDS TO NAVIGATION: NOTAM FILE GPZ.

GRAND RAPIDS (L) VORW/DME 111.4 GPZ Chan 51 N47°09.82′ W93°29.31′ 245° 31.1 NM to fld. 1400/6E.

NDB(MHW) 392 XVG N46°59.66′ W94°12.39′ at fld. **AWOS–3**. NOTAM FILE XVG.



LUVERNE

QUENTIN AANENSON FLD (LYV) 2 S UTC−6(−5DT) N43°37.01′ W96°13.06′ OMAHA

1435 B **FUEL** 100LL NOTAM FILE LYV L–12I

RWY 18–36: H4200X75 (ASPH) S–17, D–23 MIRL 0.3% up N. IAP

RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 28′. P–line.

RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 28′. Road.

AIRPORT REMARKS: Attended Mon–Fri 1300–2300Z‡. 24 hr self svc credit fuel avbl. Rwy lighting operates continuously from dusk–dawn on lowest setting. Increase via CTAF. ACTIVATE PAPI Rwy 18 and Rwy 36 and REIL Rwy 18 and Rwy 36, MIRL Rwy 18–36—CTAF.

WEATHER DATA SOURCES: AWOS–3 119.825 (507) 283–5027.

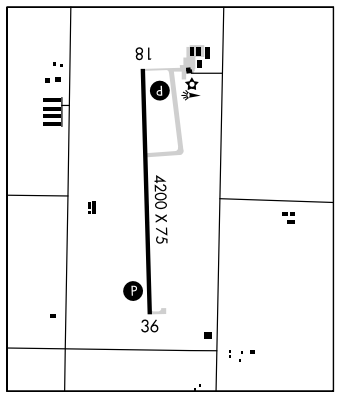
COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ **SIOUX FALLS APP/DEP CON** 125.8 (1100–0600Z‡) other times ctc.

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.05

RADIO AIDS TO NAVIGATION: NOTAM FILE FSD.

SIOUX FALLS (H) VORTACW 115.0 FSD Chan 97 N43°38.97′ W96°46.87′MN 085° 24.6 NM to fld. 1570/9E. **HIWAS**



MADISON

LAC QUI PARLE CO (DXX) 2 SE UTC−6(−5DT) N44°59.19′ W96°10.67′ TWIN CITIES

1082 B S4 **FUEL** 100LL NOTAM FILE DXX L–12I, 14H

RWY 13–31: H3301X75 (ASPH) MIRL IAP

RWY 13: PAPI(P4L). **RWY 31:** PAPI(P4L).

RWY 08–26: 3033X135 (TURF)

AIRPORT REMARKS: Attended Mon–Sat 1400–0100Z‡. Unattended Sun; for svc call 320–598–7966. Self svc fuel. For airframe and power plant repairs call 320–598–3467. Rwy 08–26 not plowed winter months. Rwy 08–26 marked with yellow cones. ACTIVATE MIRL Rwy 13–31 and PAPI Rwy 13 and Rwy 31—CTAF.

WEATHER DATA SOURCES: AWOS–3 341 DXX (320) 598–3863

COMMUNICATIONS: CTAF/UNICOM 122.8

RCO 122.3 (PRINCETON RADIO)

MINNEAPOLIS CENTER APP/DEP CON 128.5

RADIO AIDS TO NAVIGATION: NOTAM FILE MVE.

MONTEVIDEO (T) VORW/DME 111.6 MVE Chan 53 N44°58.36′ W95°42.72′ 268° 19.9 NM to fld. 1034/5E. Unmonitored.

DAWSON–MADISON NDB (MHW) 341 DXX N44°59.05′ W96°10.75′ at fld. **AWOS–3**. NOTAM FILE DXX.

WAAS	APP CRS	Rwy Idg	4200
CH 86317	175°	TDZE	1434
W18A		Apt Elev	1434

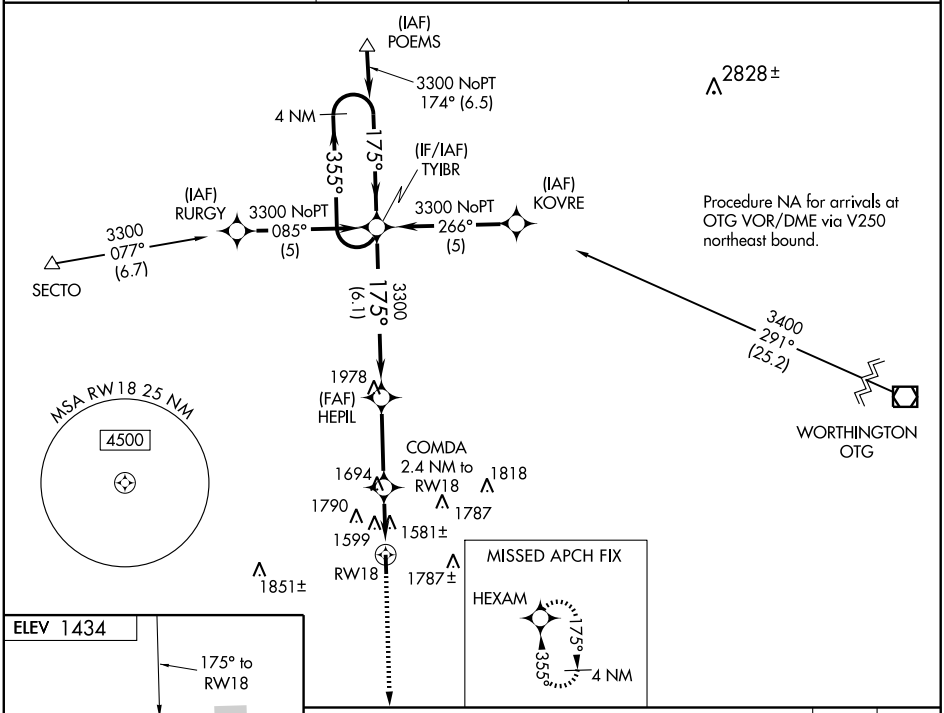
RNAV (GPS) RWY 18

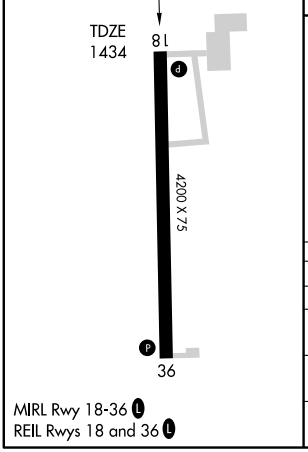
LUVERNE/ QUENTIN AANENSON FIELD (LYV)

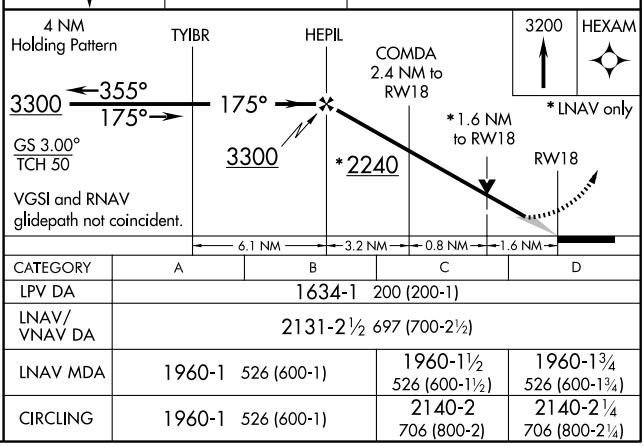
T NA For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pipestone altimeter setting and increase all DA 94 feet and all MDA 100 feet. Increase LNAV/VNAV all Cats, LNAV and Circling Cat C/D visibility ¼ mile. Baro-VNAV and VDP NA when using Pipestone altimeter setting.

MISSED APPROACH: Climb to 3200 direct HEXAM and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.825	132.05 317.4	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1634-1 200 (200-1)			
LNAV/ VNAV DA	2131-2½ 697 (700-2½)			
LNAV MDA	1960-1 526 (600-1)		1960-1½ 526 (600-1½)	1960-1¾ 526 (600-1¾)
CIRCLING	1960-1 526 (600-1)		2140-2 706 (800-2)	2140-2¼ 706 (800-2¼)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS CH 40117 W36A	APP CRS 355°	Rwy Idg 4200 TDZE 1432 Apt Elev 1434

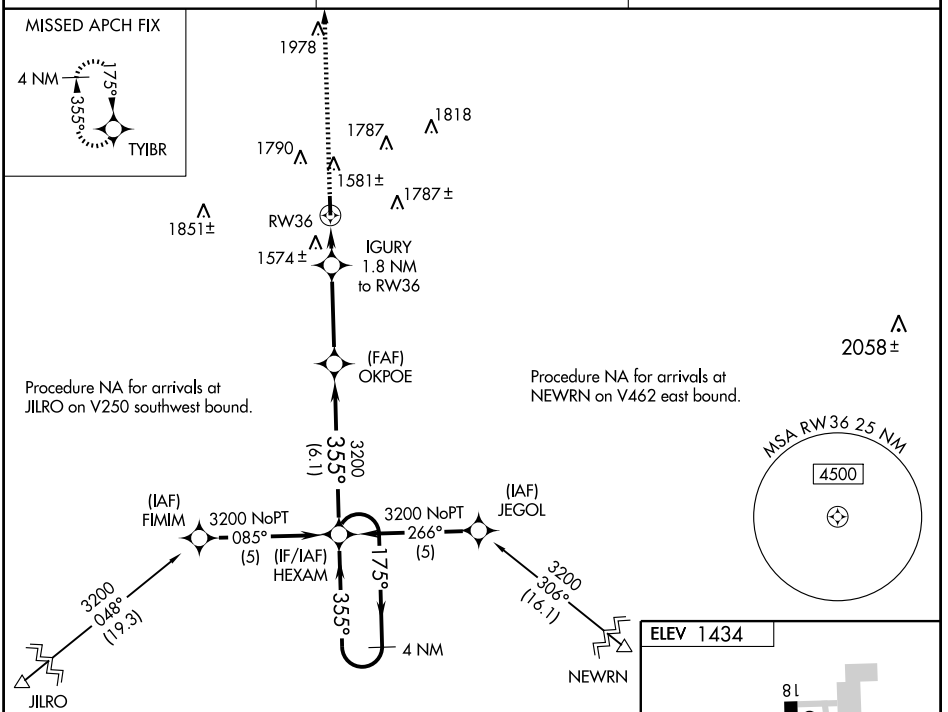
RNAV (GPS) RWY 36

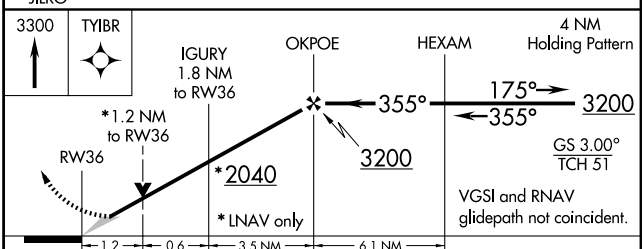
LUVERNE/ QUENTIN AANENSON FIELD (LYV)

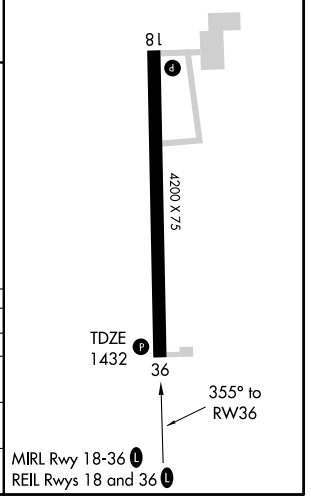
T NA For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Pipestone altimeter setting and increase all DA 94 feet and all MDA 100 feet. Increase LNAV/VNAV all Cats LNAV and Circling Cat C/D visibility ¼ mile. Baro-VNAV and VDP NA when using Pipestone altimeter setting.

MISSED APPROACH: Climb to 3300 direct TYIBR and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.825	132.05 317.4	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1632-1 200 (200-1)			
LNAV/ VNAV DA	1882-1½ 450 (500-1½)			
LNAV MDA	1840-1 408 (500-1)		1840-1¼ 408 (500-1¼)	
CIRCLING	1900-1 466 (500-1)		2140-2 706 (800-2)	2140-2¼ 706 (800-2¼)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LONGVILLE MUNI (XVG) 1 NE UTC−6(−5DT) N46°59.40′ W94°12.22′ TWIN CITIES

1334 B **FUEL** 100LL NOTAM FILE XVG L–14H

RWY 13–31: H3560X75 (ASPH) S–9, D–14 MIRL IAP

RWY 13: PAPI(P4L)—GA 4.0° TCH 20′. Thld dsplcd 450′. Trees.

RWY 31: PAPI(P4L)—GA 3.0° TCH 20′. Trees.

AIRPORT REMARKS: Unattended. Self serve fuel avbl 24 hrs. Ultralights on and invof arpt. Deer and birds on and invof arpt. ACTIVATE MIRL Rwy 13–31, PAPI Rwy 13 and Rwy 31—CTAF.

WEATHER DATA SOURCES: AWOS–3 392 XVG (218) 363–3347.

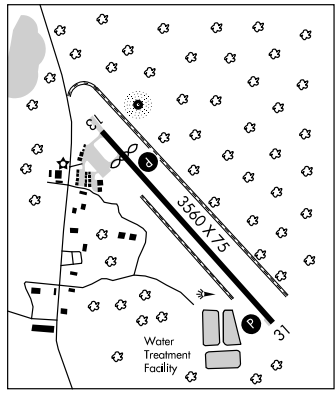
COMMUNICATIONS: CTAF 122.9

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 118.05

RADIO AIDS TO NAVIGATION: NOTAM FILE GPZ.

GRAND RAPIDS (L) VORW/DME 111.4 GPZ Chan 51 N47°09.82′ W93°29.31′ 245° 31.1 NM to fld. 1400/6E.

NDB(MHW) 392 XVG N46°59.66′ W94°12.39′ at fld. **AWOS–3**. NOTAM FILE XVG.



LUVERNE

QUENTIN AANENSON FLD (LYV) 2 S UTC−6(−5DT) N43°37.01′ W96°13.06′ OMAHA

1435 B **FUEL** 100LL NOTAM FILE LYV L–12I

RWY 18–36: H4200X75 (ASPH) S–17, D–23 MIRL 0.3% up N. IAP

RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 28′. P–line.

RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 28′. Road.

AIRPORT REMARKS: Attended Mon–Fri 1300–2300Z‡. 24 hr self svc credit fuel avbl. Rwy lighting operates continuously from dusk–dawn on lowest setting. Increase via CTAF. ACTIVATE PAPI Rwy 18 and Rwy 36 and REIL Rwy 18 and Rwy 36, MIRL Rwy 18–36—CTAF.

WEATHER DATA SOURCES: AWOS–3 119.825 (507) 283–5027.

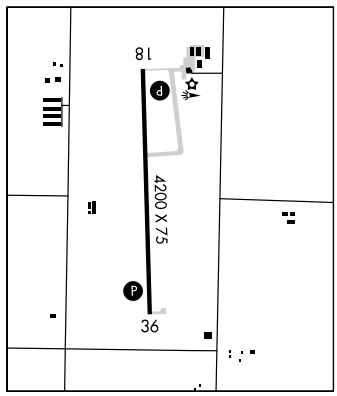
COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ **SIOUX FALLS APP/DEP CON** 125.8 (1100–0600Z‡) other times ctc.

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.05

RADIO AIDS TO NAVIGATION: NOTAM FILE FSD.

SIOUX FALLS (H) VORTACW 115.0 FSD Chan 97 N43°38.97′ W96°46.87′MN 085° 24.6 NM to fld. 1570/9E. **HIWAS**



MADISON

LAC QUI PARLE CO (DXX) 2 SE UTC−6(−5DT) N44°59.19′ W96°10.67′ TWIN CITIES

1082 B S4 **FUEL** 100LL NOTAM FILE DXX L–12I, 14H

RWY 13–31: H3301X75 (ASPH) MIRL IAP

RWY 13: PAPI(P4L). **RWY 31:** PAPI(P4L).

RWY 08–26: 3033X135 (TURF)

AIRPORT REMARKS: Attended Mon–Sat 1400–0100Z‡. Unattended Sun; for svc call 320–598–7966. Self svc fuel. For airframe and power plant repairs call 320–598–3467. Rwy 08–26 not plowed winter months. Rwy 08–26 marked with yellow cones. ACTIVATE MIRL Rwy 13–31 and PAPI Rwy 13 and Rwy 31—CTAF.

WEATHER DATA SOURCES: AWOS–3 341 DXX (320) 598–3863

COMMUNICATIONS: CTAF/UNICOM 122.8

RCO 122.3 (PRINCETON RADIO)

MINNEAPOLIS CENTER APP/DEP CON 128.5

RADIO AIDS TO NAVIGATION: NOTAM FILE MVE.

MONTEVIDEO (T) VORW/DME 111.6 MVE Chan 53 N44°58.36′ W95°42.72′ 268° 19.9 NM to fld. 1034/5E. Unmonitored.

DAWSON–MADISON NDB (MHW) 341 DXX N44°59.05′ W96°10.75′ at fld. **AWOS–3**. NOTAM FILE DXX.

NDB DXX 341	APP CRS 306°	Rwy Idg 3301 TDZE 1082 Apt Elev 1082

NDB or GPS RWY 31

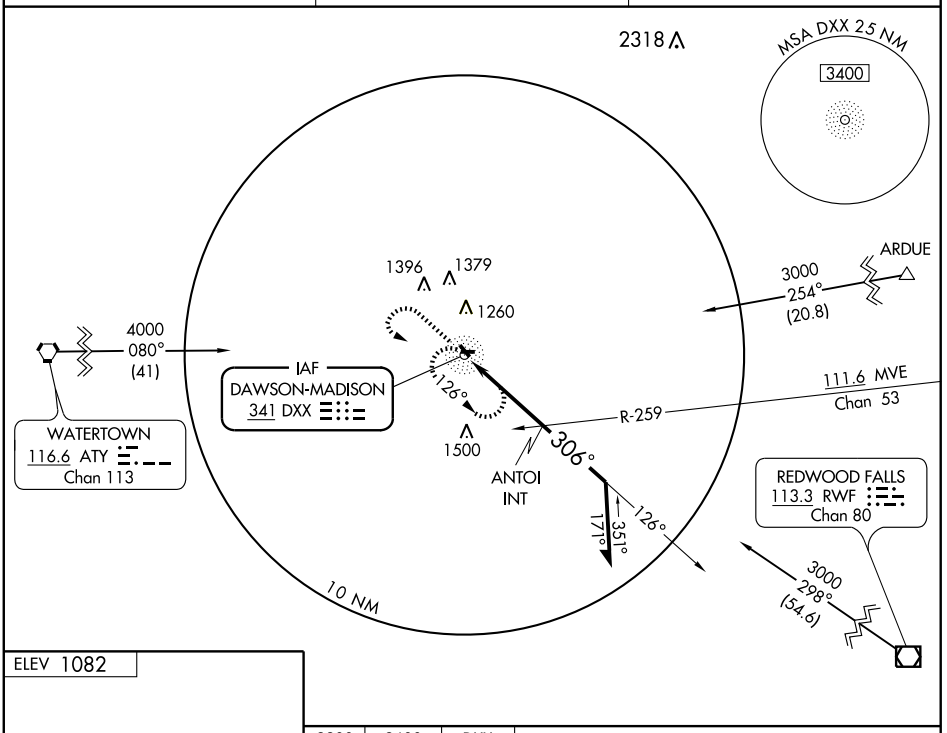
MADISON/LAC QUI PARLE COUNTY (DXX)

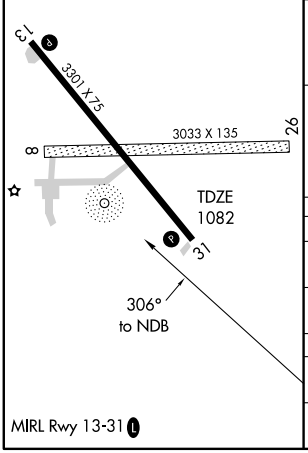
NA

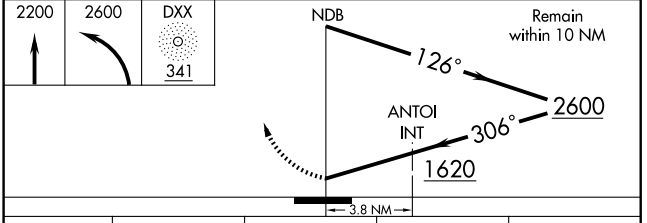
Activate MIRL Rwy 13-31-CTAF.

MISSED APPROACH: Climb to 2200 then climbing left turn to 2600 direct DXX NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
341	128.5 306.2	122.8 (CTAF) L







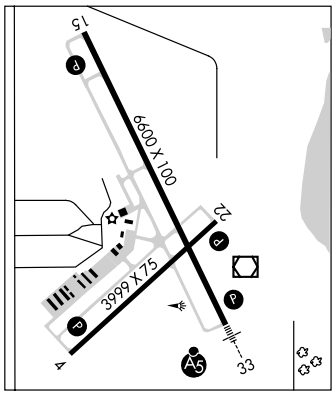
CATEGORY	A	B	C	D
S-31	1620-1	538 (600-1)	1620-1½ 538 (600-1½)	NA
CIRCLING	1620-1	538 (600-1)	1620-1½ 538 (600-1½)	NA
ANTOI FIX MINIMA				
S-31	1500-1	418 (500-1)	1500-1¼ 418 (500-1¼)	NA
CIRCLING	1560-1	478 (500-1)	1560-1½ 478 (500-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

MAHNOMEN CO (3N8) 3 SSE UTC−6(−5DT) N47°15.63′ W95°55.69′ **TWIN CITIES**
1244 B NOTAM FILE PNM
RWY 17–35: 3400X75 (ASPH) MIRL
RWY 17: PAPI(P2L)—GA 3.0° TCH 25′.
RWY 35: REIL. PAPI(P2L)—GA 3.0° TCH 25′.
RWY 09–27: 2720X120 (TURF)
AIRPORT REMARKS: Ultralight tfc on and invof arpt. Attended dusk–dawn. MIRL Rwy 17–35 on low ints, incr ints and ACTIVATE REIL Rwy 17 and Rwy 35—CTAF. Rwy 09–27 not plowed winter months.
COMMUNICATIONS: CTAF 122.9

MAL'S SERPENT LAKE SPB (See DEERWOOD)

MANKATO RGNL (MKT) 5 NE UTC−6(−5DT) N44°13.37′ W93°55.16′ **OMAHA**
1021 B S4 **FUEL** 100LL, JET A OX 2 NOTAM FILE MKT **H–2J, L–12I, A**
RWY 15–33: H6600X100 (CONC–GRVD) S–40, D–60, 2D–100 HIRL **IAP**
RWY 15: REIL. PAPI(P4R)—GA 3.0° TCH 48′.
RWY 33: MALSR. PAPI(P4R)—GA 3.0° TCH 48′.
RWY 04–22: H3999X75 (ASPH) S–18, D–25 MIRL
0.3% up NE
RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 39′.
RWY 22: REIL. PAPI(P4L)—GA 3.0° TCH 26′. Trees.
AIRPORT REMARKS: Attended Mon–Fri 1300–0200Z‡, Sat–Sun 1400–0100Z‡. For fuel and svc after hrs call 507–469–0228. Deer on and invof arpt. Migratory waterfowl on and invof arpt. ACTIVATE MIRL Rwy 04–22, PAPI and REIL Rwy 04 and Rwy 22, HIRL Rwy 15–33, PAPI and REIL Rwy 15, PAPI and MALSR Rwy 33—CTAF.
WEATHER DATA SOURCES: AWOS–3 110.8 MKT (507) 625–3726.
COMMUNICATIONS: CTAF/UNICOM 122.725
RCO 122.1R 110.8T (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 135.0
AIRSPACE: CLASS E svc Mon–Fri 1100–0530Z‡, Sat 1300–1600Z‡ and 1900–2200Z‡, Sun 2130–0530Z‡ other times CLASS G.
RADIO AIDS TO NAVIGATION: NOTAM FILE MKT.
(L) VOR/DME 110.8 MKT Chan 45 N44°13.19′ W93°54.74′ at fld. 1026/7E. **AWOS–3**.
DME portion unusable 325°–150° beyond 16 NM.
ILS 108.7 I–MKT Rwy 33. ILS unmonitored.
COPTER ILS 108.7 I–MKT Rwy 33. ILS unmonitored.



MAPLE LAKE MUNI (MGG) 1 NE UTC−6(−5DT) N45°14.16′ W93°59.14′ **TWIN CITIES**
1028 B S2 **FUEL** 100LL NOTAM FILE MGG **L–14H, A**
RWY 10–28: H2796X60 (ASPH) LIRL (NSTD) **IAP, AD**
RWY 10: Thld dsplcd 100′. Tree. **RWY 28:** Hill.
AIRPORT REMARKS: Attended dalgt hrs. Arpt not attended Thanksgiving, Christmas, New Years and Easter. Rwy 10–28 NSTD LIRL, 400′ spacing between lights. Ultralights on and invof arpt. Migratory waterfowl on and invof arpt. Multiple cracks with grass growing in them.
WEATHER DATA SOURCES: AWOS–3 128.325 (320) 963–3300.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS APP/DEP CON** 126.5
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
DARWIN (L) VORTAC 109.0 DWN Chan 27 N45°05.25′ W94°27.23′ 059° 21.8 NM to fld. 1130/7E.

LOC I-MKT	APP CRS	Rwy Idg	6600
108.7	331°	TDZE	1020
		Apt Elev	1020

COPTER ILS or LOC RWY 33

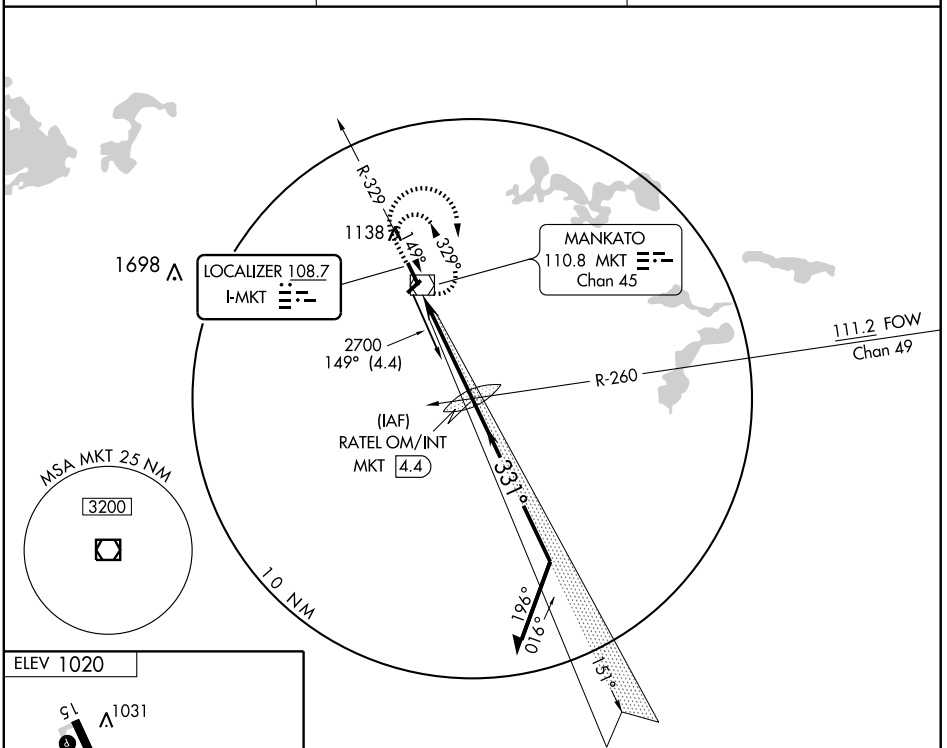
MANKATO RGNL (MKT)

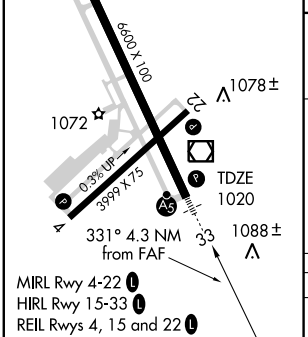
For inoperative MALSR increase visibility to ½ mile.

MALSR

MISSED APPROACH: Climb to 2000 then climbing right turn to 2700 direct MKT VOR/DME and hold.

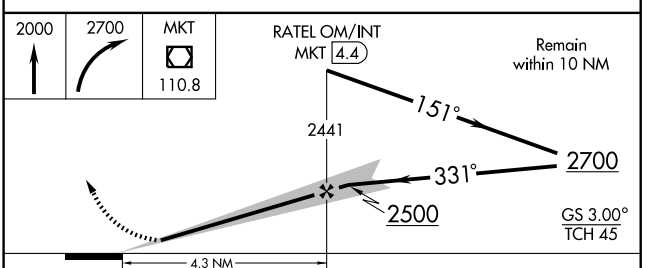
AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.8	135.0 306.9	122.725 (CTAF) L





MIRL Rwy 4-22 L
HIRL Rwy 15-33 L
REIL Rwys 4, 15 and 22 L

FAF to MAP 4.3 NM					
Knots	45	60	75	90	105
Min:Sec	5:44	4:18	3:26	2:52	2:27



CATEGORY	COPTER	B	C	D
S-ILS 33	1220-¼ 200 (200-¼)	NA		
S-LOC 33	1420-¼ 400 (400-¼)	NA		
CIRCLING	NA			

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

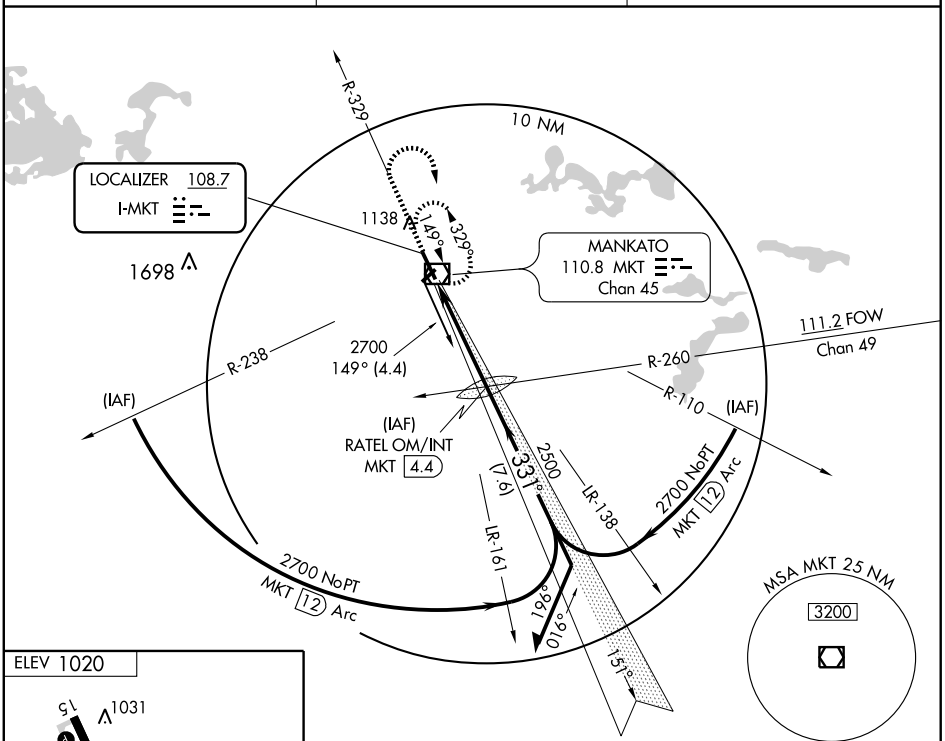
LOC I-MKT	APP CRS	Rwy Idg	6600
108.7	331°	TDZE	1020
		Apt Elev	1020

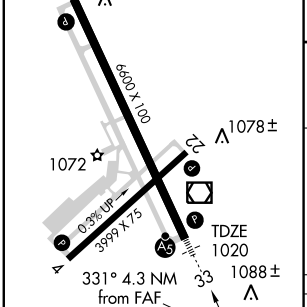
ILS RWY 33
MANKATO RGNL (MKT)

MALSR

MISSED APPROACH: Climb to 2000 then climbing right turn to 2700 direct MKT VOR/DME and hold.

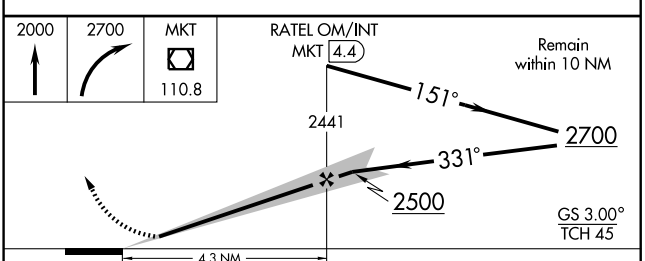
AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.8	135.0 306.9	122.725 (CTAF) L





MIRL Rwy 4-22 L
HIRL Rwy 15-33 L
REIL Rwys 4, 15 and 22 L

FAF to MAP 4.3 NM					
Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26



CATEGORY	A	B	C	D
S-ILS 33	1220-½ 200 (200-½)			
S-LOC 33	1420-½ 400 (400-½)			1420-¾ 400 (400-¾)
CIRCLING	1460-1 440 (500-1)	1480-1 460 (500-1)	1480-1½ 460 (500-1½)	1580-2 560 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 4

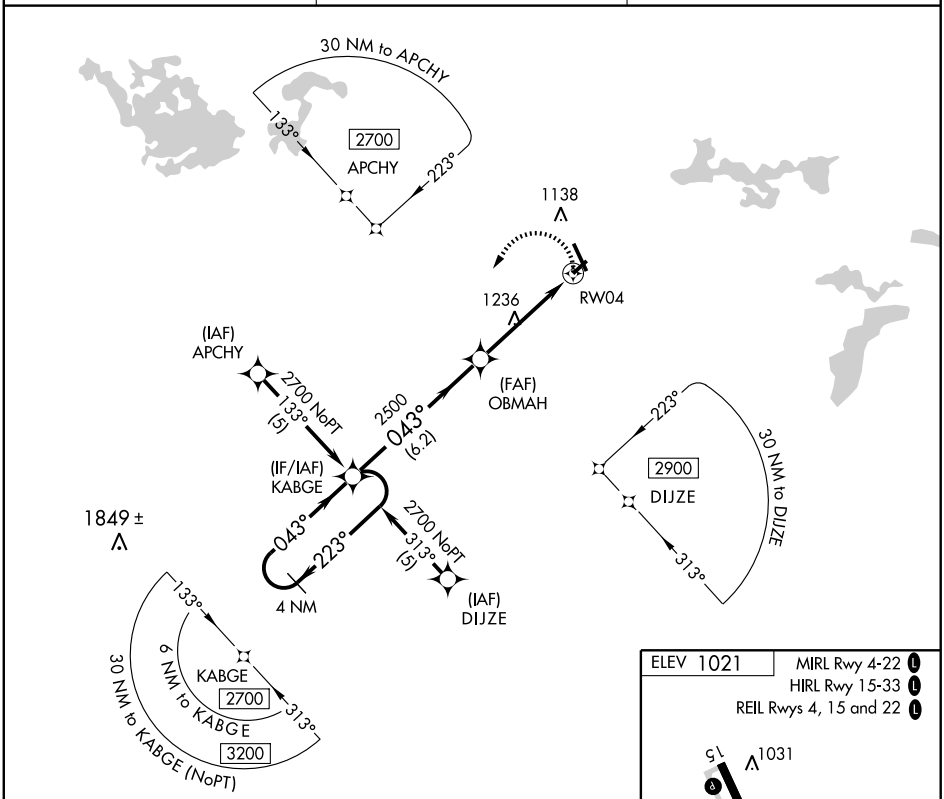
MANKATO RGNL (MKT)

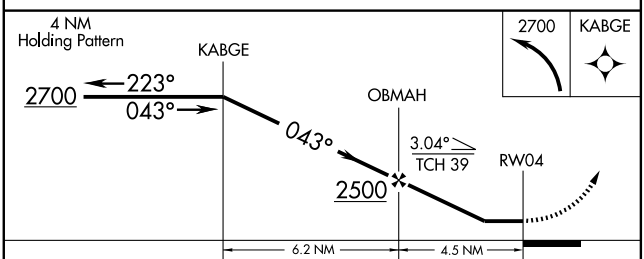
APP CRS	Rwy Idg	3999
043°	TDZE	1018
	Apt Elev	1021

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received use Waseca altimeter setting and increase all MDA 60 feet.

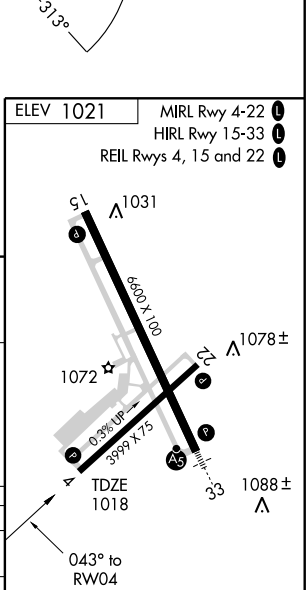
MISSED APPROACH: Climbing left turn to 2700 direct KABGE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.8	135.0 306.9	122.725 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1540-1	522 (600-1)	1540-1½ 522 (600-1½)	NA
CIRCLING	1540-1	519 (600-1)	1540-1½ 519 (600-1½)	NA



NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	6600
CH 45615	151°	TDZE	1020
W15A		Apt Elev	1021

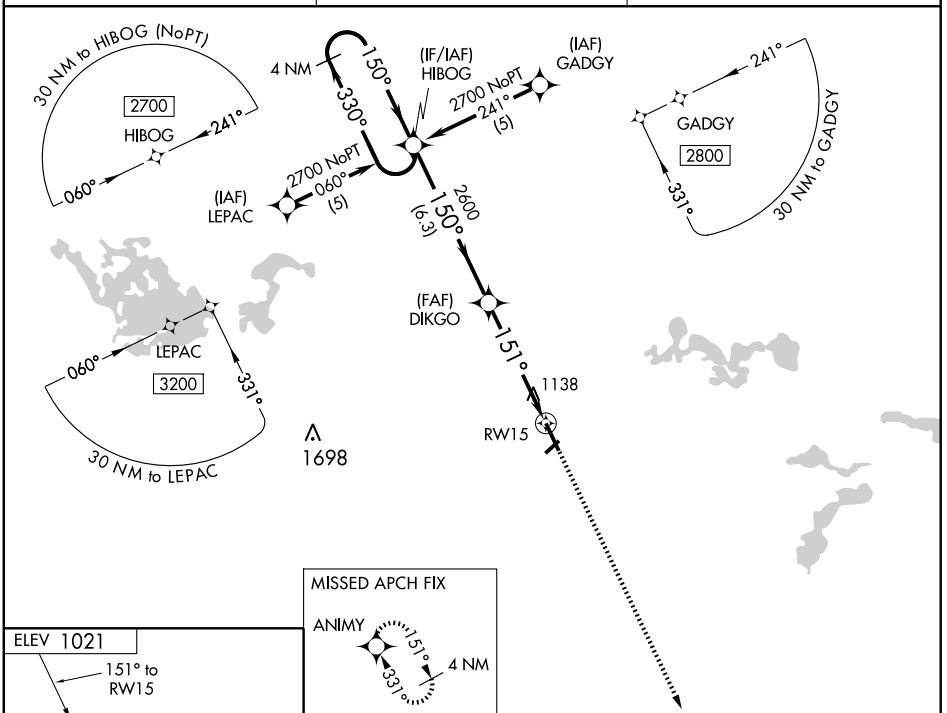
RNAV (GPS) RWY 15

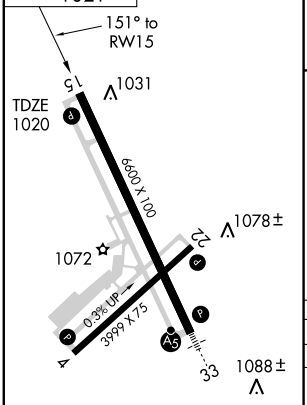
MANKATO RGNL (MKT)

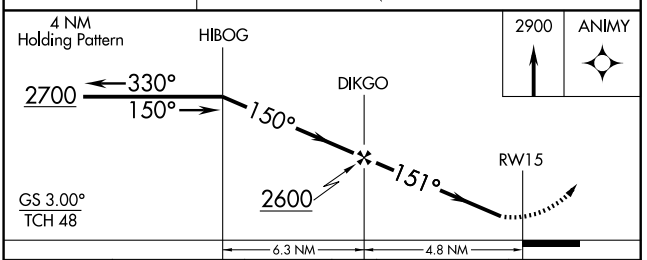
Baro-VNAV NA when using Waseca altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received use Waseca altimeter setting and increase all DA 57 feet and all MDA 60 feet and increase LPV all Cats visibility ¼ mile, and LNAV Cats C/D visibility ¼ mile.

MISSED APPROACH: Climb to 2900 direct ANIMY and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.8	135.0 306.9	122.725 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1373-1¼ 353 (400-1¼)			
LNAV/VNAV DA	1416-1½ 396 (400-1½)			
LNAV MDA	1400-1 380 (400-1)			1400-1¼ 380 (400-1¼)
CIRCLING	1440-1 419 (500-1)	1480-1 459 (500-1)	1480-1½ 459 (500-1½)	1580-2 559 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 22

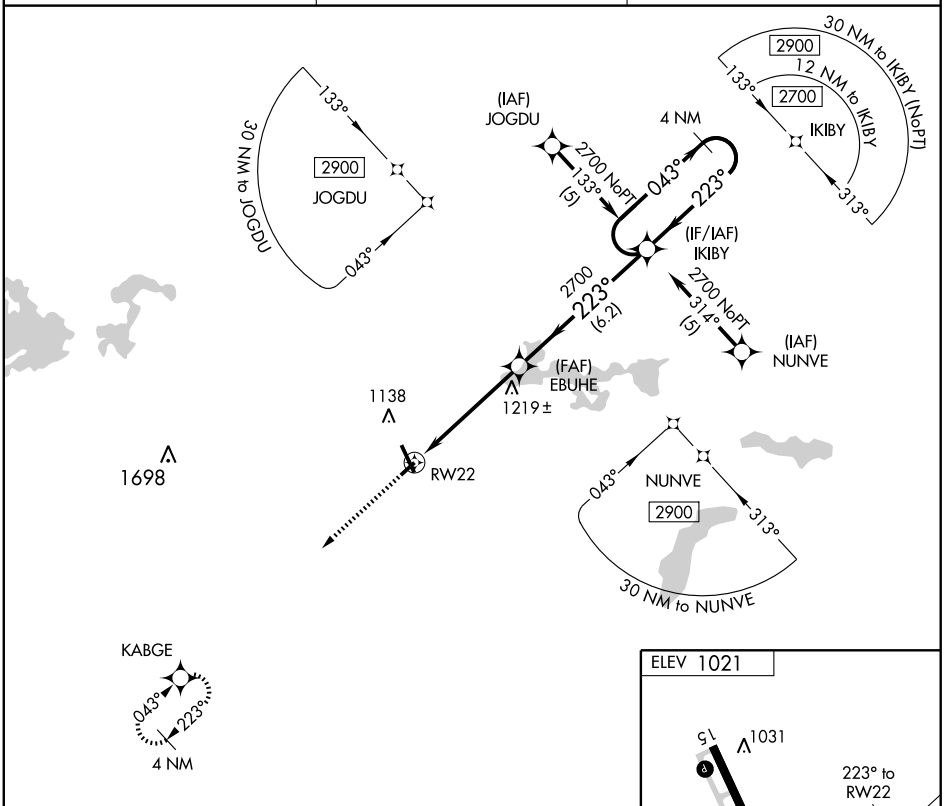
MANKATO RGNL (MKT)

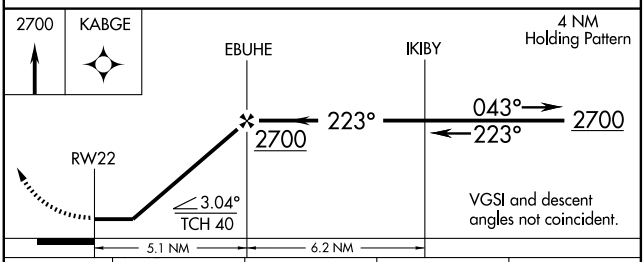
APP CRS	Rwy Idg	3999
223°	TDZE	1021
	Apt Elev	1021

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received use Waseca altimeter setting and increase all MDA 60 feet and increase LNAV Cat C visibility ¼ mile.

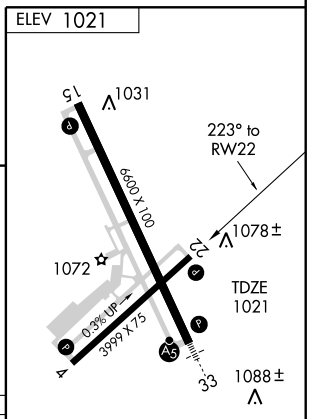
MISSED APPROACH: Climb to 2700 direct KABGE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.8	135.0 306.9	122.725 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1480-1	459 (500-1)	1480-1¼ 459 (500-1¼)	NA
CIRCLING	1480-1	459 (500-1)	1480-1½ 459 (500-1½)	NA



MIRL Rwy 4-22 L
HIRL Rwy 15-33 L
REIL Rwys 4, 15 and 22 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy ldg	6600
CH 86315	331°	TDZE	1021
W33A		Apt Elev	1021

RNAV (GPS) RWY 33

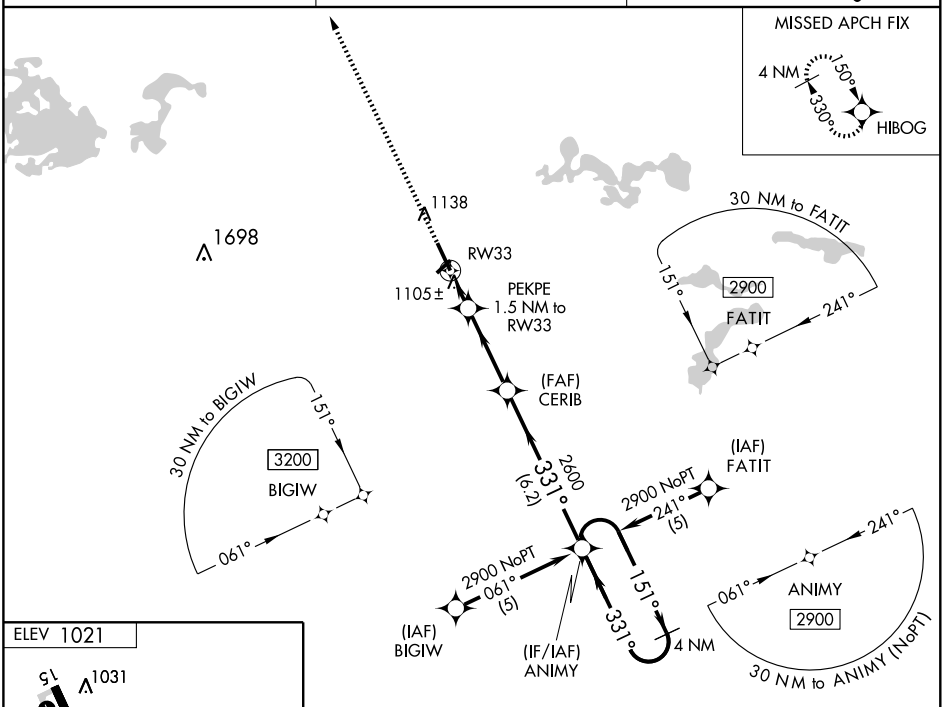
MANKATO RGNL (MKT)

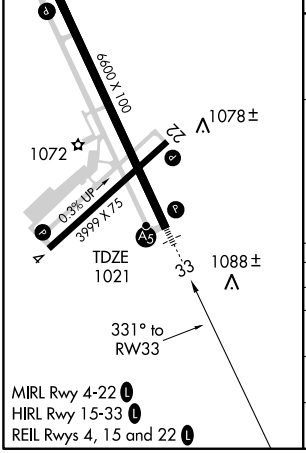
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received use Waseca altimeter setting and increase all DA 57 feet, all MDA 60 feet, and increase LNAV/VNAV all Cats visibility ¼ mile. Inoperative table does not apply to LNAV Cat D. When using Waseca altimeter setting; for inoperative MALSR increase LPV all Cats visibility ½ mile and LNAV Cat D visibility ¼ mile. Baro-VNAV and VDP NA when using Waseca altimeter setting.

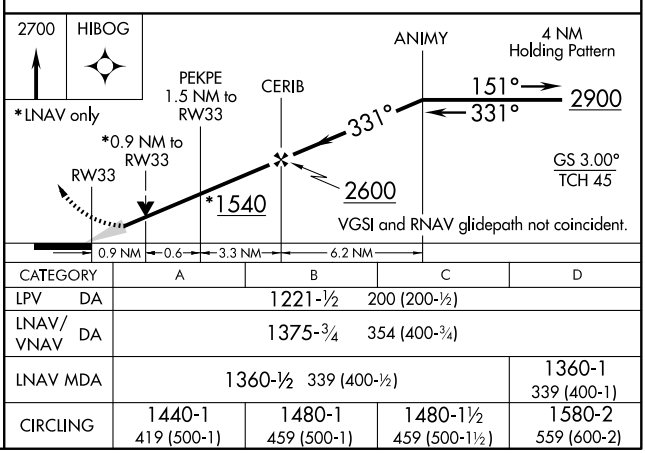
MALSR

MISSED APPROACH: Climb to 2700 direct HIBOG and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.8	135.0 306.9	122.725 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1221-½	200 (200-½)		
LNAV/VNAV DA	1375-¾	354 (400-¾)		
LNAV MDA	1360-½	339 (400-½)		1360-1 339 (400-1)
CIRCLING	1440-1 419 (500-1)	1480-1 459 (500-1)	1480-1½ 459 (500-1½)	1580-2 559 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME MKT	APP CRS	Rwy Idg	6600
110.8	139°	TDZE	1020
Chan 45		Apt Elev	1021

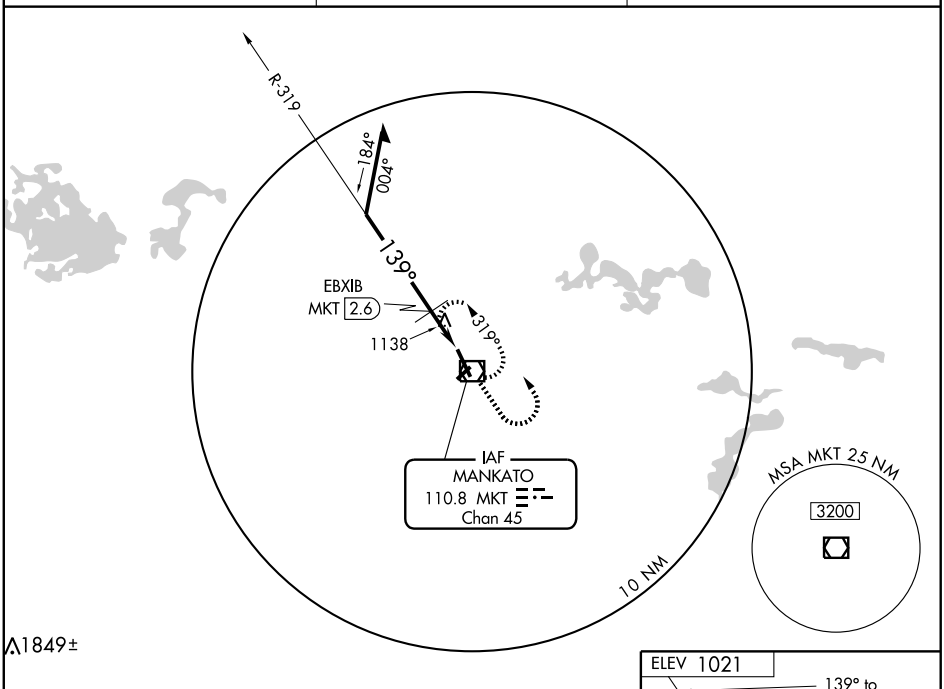
VOR RWY 15

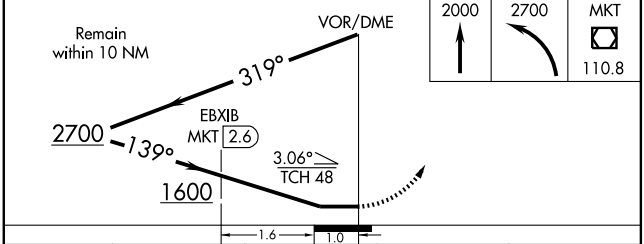
MANKATO RGNL (MKT)

When local altimeter setting not received use Waseca altimeter setting and increase EBXIB FIX MINIMUMS all MDA 60 feet, increase Circling Cats C and D visibility ¼ mile, and increase EBXIB FIX MINIMUMS S-15 Cats C and D visibility ¼ mile.

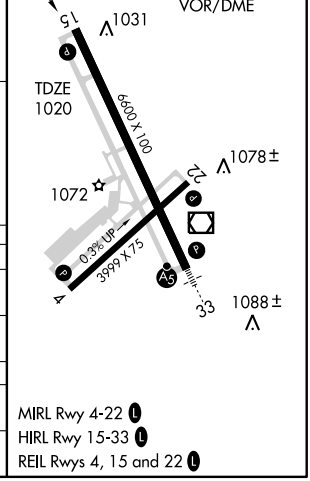
MISSED APPROACH: Climb to 2000 then climbing left turn to 2700 direct MKT VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.8	135.0 306.9	122.725 (CTAF) L





CATEGORY	A	B	C	D
S-15	1600-1 580 (600-1)		1600-1½ 580 (600-1½)	1600-1¾ 580 (600-1¾)
CIRCLING	1600-1 579 (600-1)		1600-1½ 579 (600-1½)	1600-2 579 (600-2)
EBXIB FIX MINIMUMS				
S-15	1400-1 380 (400-1)			1400-1¼ 380 (400-1¼)
CIRCLING	1440-1 419 (500-1)	1480-1 459 (500-1)	1480-1½ 459 (500-1½)	1580-2 559 (600-2)



MIRL Rwy 4-22 L
HIRL Rwy 15-33 L
REIL Rwys 4, 15 and 22 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME MKT	APP CRS	Rwy Idg	6600
110.8	340°	TDZE	1021
Chan 45		Apt Elev	1021

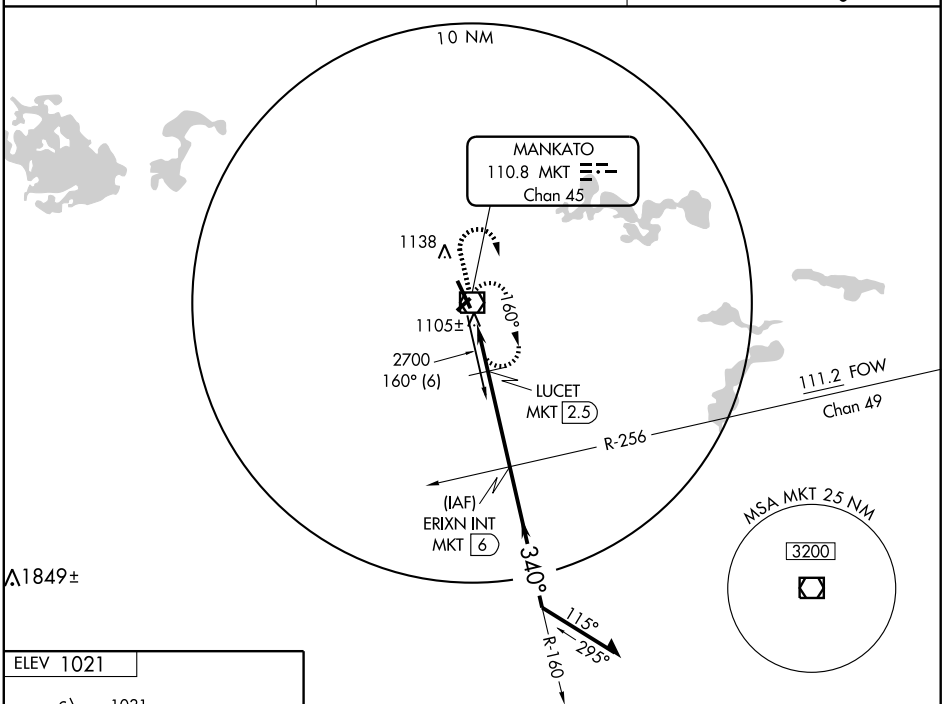
VOR RWY 33
MANKATO RGNL (MKT)

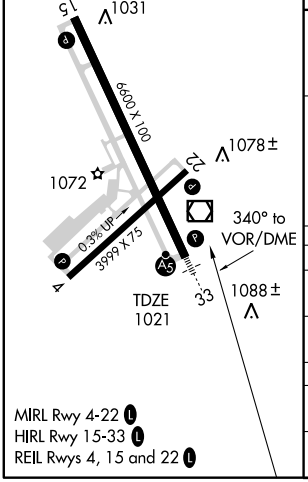
VDP NA when using Waseca altimeter setting. When local altimeter setting not received use Waseca altimeter setting and increase all MDA 60 feet, and increase S-33 Cats C and D visibility ¼ mile and LUCET FIX MINIMUMS S-33 Cat C ¼ mile. For inoperative MALSR increase LUCET FIX MINIMUMS Cat D visibility ¼ mile.

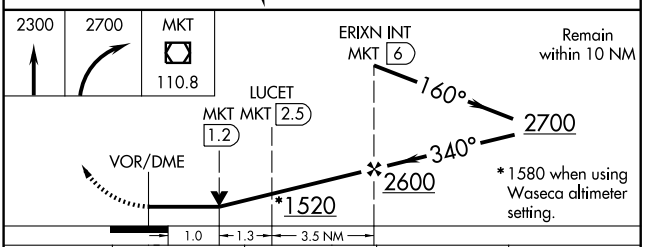
MALSR

MISSED APPROACH: Climb to 2300 then climbing right turn to 2700 direct MKT VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.8	135.0 306.9	122.725 (CTAF) L







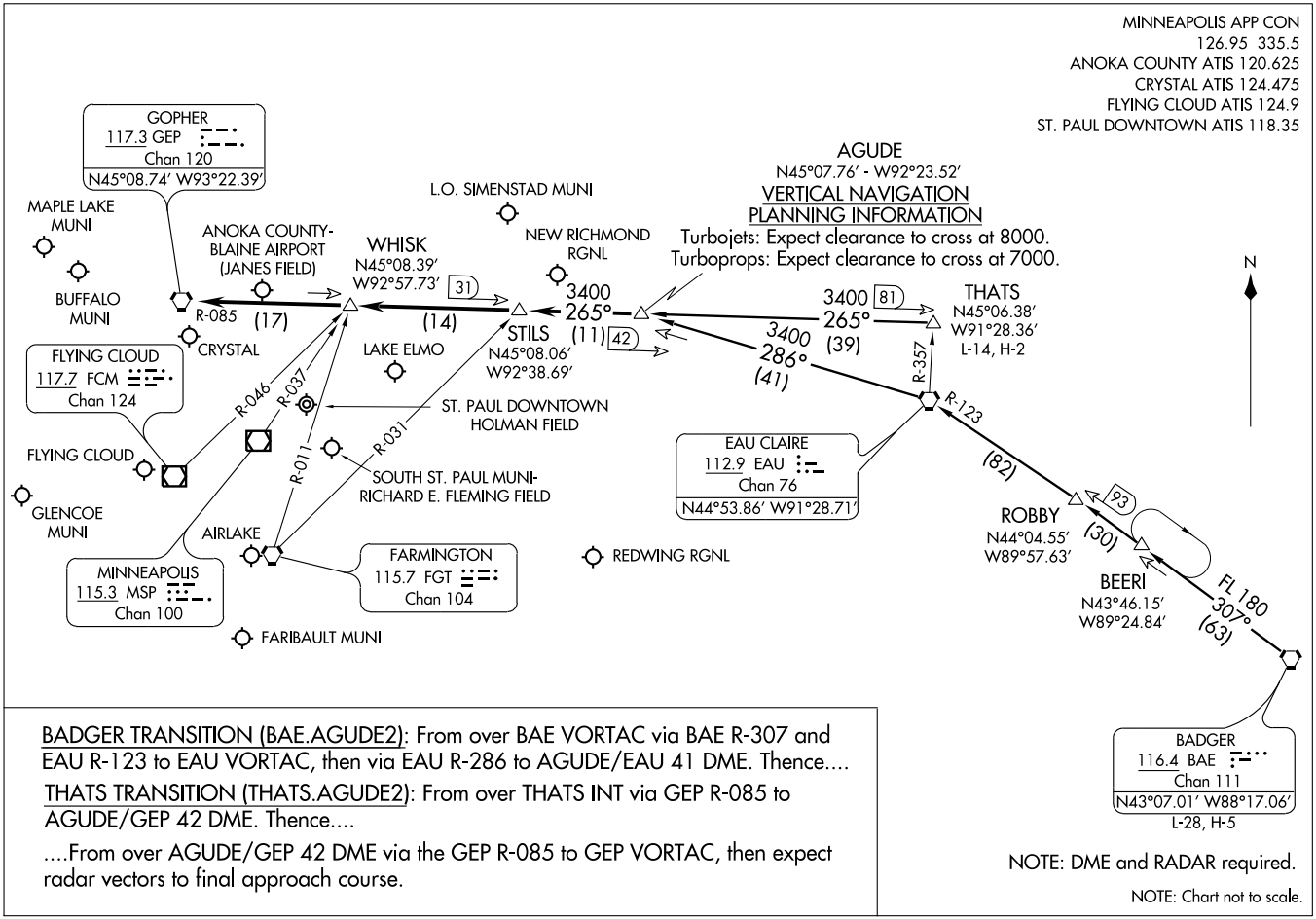
CATEGORY	A	B	C	D
S-33	1520-½ 499 (500-½)		1520-¾ 499 (500-¾)	1520-1 499 (500-1)
CIRCLING	1520-1 499 (500-1)		1520-1½ 499 (500-1½)	1580-2 559 (600-2)
LUCET FIX MINIMUMS				
S-33	1400-½ 379 (400-½)			1400-1 379 (400-1)
CIRCLING	1440-1 419 (500-1)	1480-1 459 (500-1)	1480-1½ 459 (500-1½)	1580-2 559 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

AGUDE TWO ARRIVAL

(AGUDE.AGUDE2) 10154

MINNEAPOLIS-ST. PAUL, MINNESOTA



BADGER TRANSITION (BAE.AGUDE2): From over BAE VORTAC via BAE R-307 and EAU R-123 to EAU VORTAC, then via EAU R-286 to AGUDE/EAU 41 DME. Thence....

THATS TRANSITION (THATS.AGUDE2): From over THATS INT via GEP R-085 to AGUDE/GEP 42 DME. Thence....

....From over AGUDE/GEP 42 DME via the GEP R-085 to GEP VORTAC, then expect radar vectors to final approach course.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

(AGUDE.AGUDE2) 10154

AGUDE TWO ARRIVAL

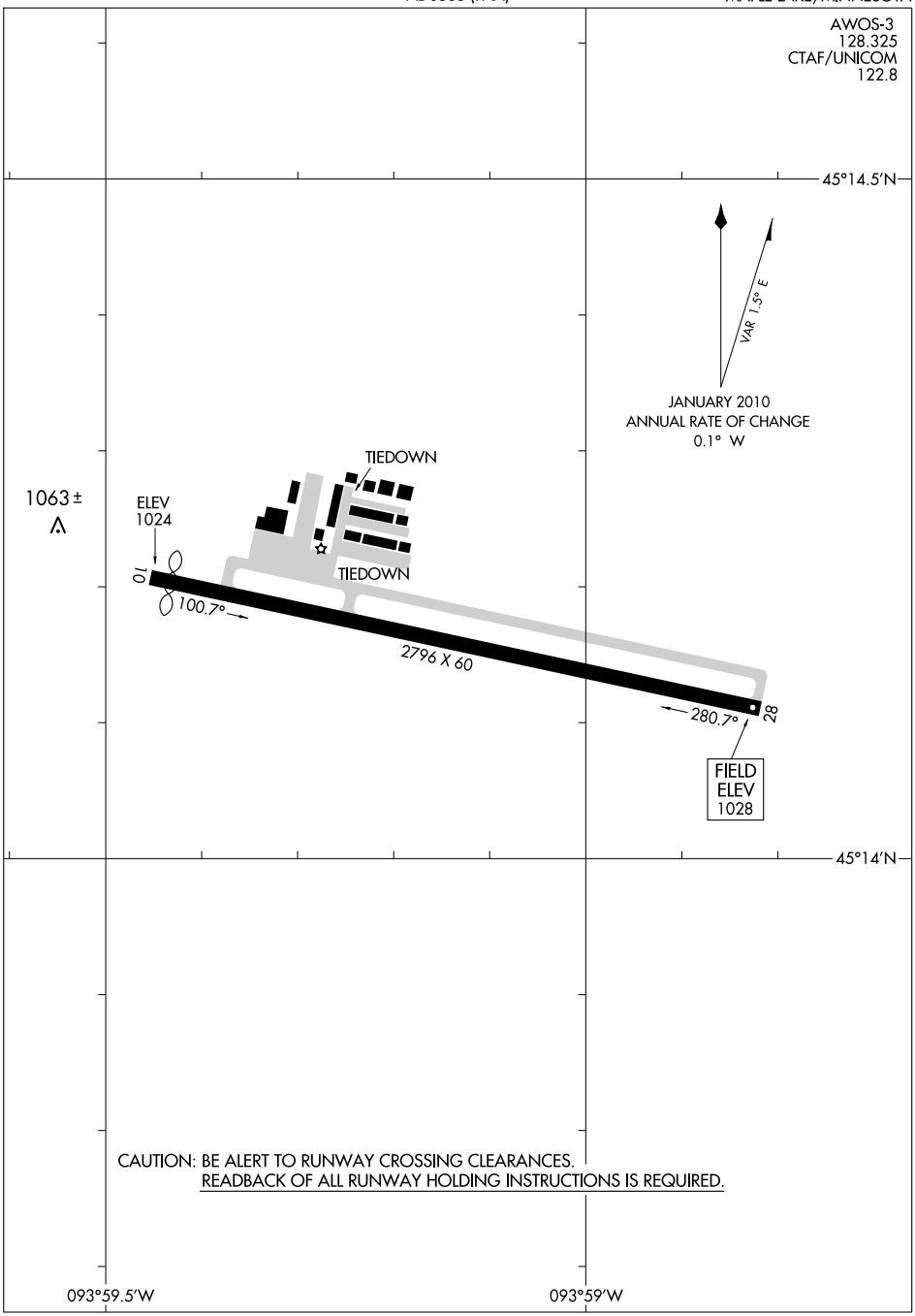
ST-263 (FAA)

MINNEAPOLIS-ST. PAUL, MINNESOTA

AIRPORT DIAGRAM

AL-6585 (FAA)

MAPLE LAKE MUNI (MGG)
MAPLE LAKE, MINNESOTA



NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

AIRPORT DIAGRAM

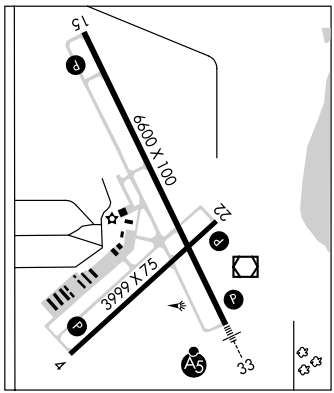
MAPLE LAKE, MINNESOTA
MAPLE LAKE MUNI (MGG)

10210

MAHNOMEN CO (3N8) 3 SSE UTC−6(−5DT) N47°15.63′ W95°55.69′ **TWIN CITIES**
1244 B NOTAM FILE PNM
RWY 17–35: 3400X75 (ASPH) MIRL
RWY 17: PAPI(P2L)—GA 3.0° TCH 25′.
RWY 35: REIL. PAPI(P2L)—GA 3.0° TCH 25′.
RWY 09–27: 2720X120 (TURF)
AIRPORT REMARKS: Ultralight tfc on and invof arpt. Attended dusk–dawn. MIRL Rwy 17–35 on low ints, incr ints and ACTIVATE REIL Rwy 17 and Rwy 35—CTAF. Rwy 09–27 not plowed winter months.
COMMUNICATIONS: CTAF 122.9

MAL'S SERPENT LAKE SPB (See DEERWOOD)

MANKATO RGNL (MKT) 5 NE UTC−6(−5DT) N44°13.37′ W93°55.16′ **OMAHA**
1021 B S4 **FUEL** 100LL, JET A OX 2 NOTAM FILE MKT **H–2J, L–12I, A**
RWY 15–33: H6600X100 (CONC–GRVD) S–40, D–60, 2D–100 HIRL **IAP**
RWY 15: REIL. PAPI(P4R)—GA 3.0° TCH 48′.
RWY 33: MALSR. PAPI(P4R)—GA 3.0° TCH 48′.
RWY 04–22: H3999X75 (ASPH) S–18, D–25 MIRL
0.3% up NE
RWY 04: REIL. PAPI(P4L)—GA 3.0° TCH 39′.
RWY 22: REIL. PAPI(P4L)—GA 3.0° TCH 26′. Trees.
AIRPORT REMARKS: Attended Mon–Fri 1300–0200Z‡, Sat–Sun 1400–0100Z‡. For fuel and svc after hrs call 507–469–0228. Deer on and invof arpt. Migratory waterfowl on and invof arpt. ACTIVATE MIRL Rwy 04–22, PAPI and REIL Rwy 04 and Rwy 22, HIRL Rwy 15–33, PAPI and REIL Rwy 15, PAPI and MALSR Rwy 33—CTAF.
WEATHER DATA SOURCES: AWOS–3 110.8 MKT (507) 625–3726.
COMMUNICATIONS: CTAF/UNICOM 122.725
RCO 122.1R 110.8T (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 135.0
AIRSPACE: CLASS E svc Mon–Fri 1100–0530Z‡, Sat 1300–1600Z‡ and 1900–2200Z‡, Sun 2130–0530Z‡ other times CLASS G.
RADIO AIDS TO NAVIGATION: NOTAM FILE MKT.
(L) VOR/DME 110.8 MKT Chan 45 N44°13.19′ W93°54.74′ at fld. 1026/7E. **AWOS–3**.
DME portion unusable 325°–150° beyond 16 NM.
ILS 108.7 I–MKT Rwy 33. ILS unmonitored.
COPTER ILS 108.7 I–MKT Rwy 33. ILS unmonitored.



MAPLE LAKE MUNI (MGG) 1 NE UTC−6(−5DT) N45°14.16′ W93°59.14′ **TWIN CITIES**
1028 B S2 **FUEL** 100LL NOTAM FILE MGG **L–14H, A**
RWY 10–28: H2796X60 (ASPH) LIRL (NSTD) **IAP, AD**
RWY 10: Thld dsplcd 100′. Tree. **RWY 28:** Hill.
AIRPORT REMARKS: Attended dalgt hrs. Arpt not attended Thanksgiving, Christmas, New Years and Easter. Rwy 10–28 NSTD LIRL, 400′ spacing between lights. Ultralights on and invof arpt. Migratory waterfowl on and invof arpt. Multiple cracks with grass growing in them.
WEATHER DATA SOURCES: AWOS–3 128.325 (320) 963–3300.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS APP/DEP CON** 126.5
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
DARWIN (L) VORTAC 109.0 DWN Chan 27 N45°05.25′ W94°27.23′ 059° 21.8 NM to fld. 1130/7E.

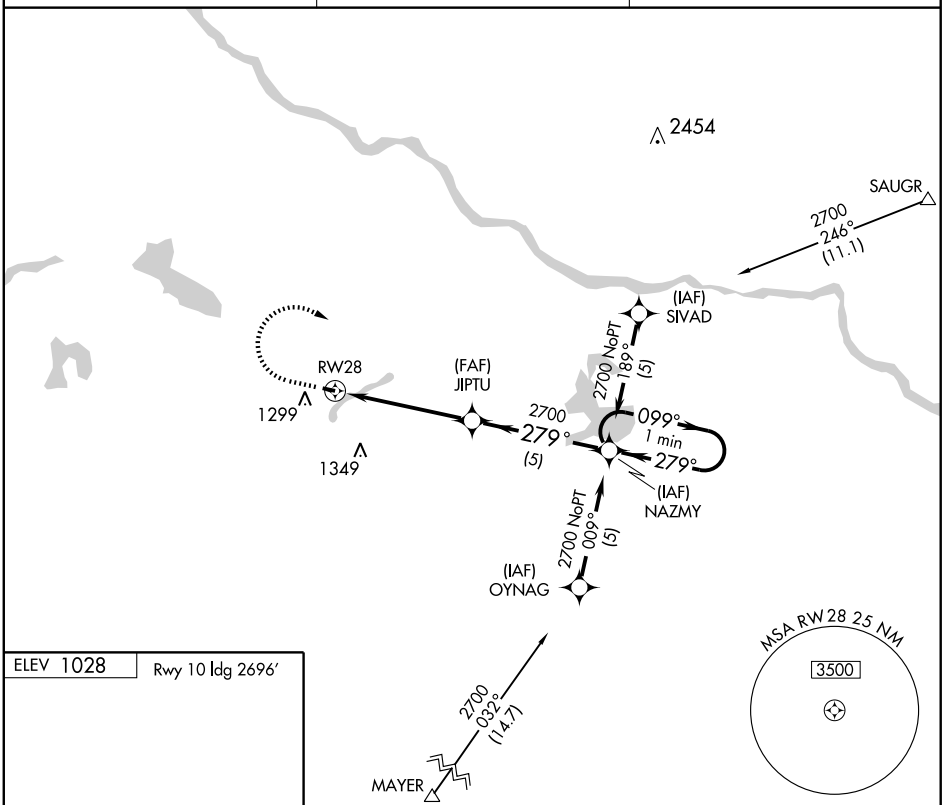
APP CRS	Rwy Idg	2796
279°	TDZE	1028
	Apt Elev	1028

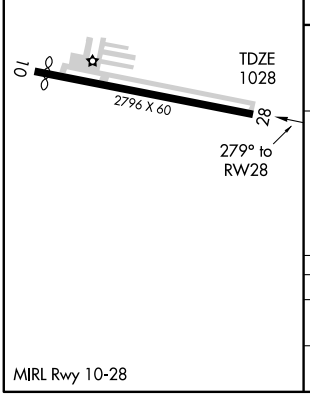
GPS RWY 28
MAPLE LAKE MUNI (MGG)

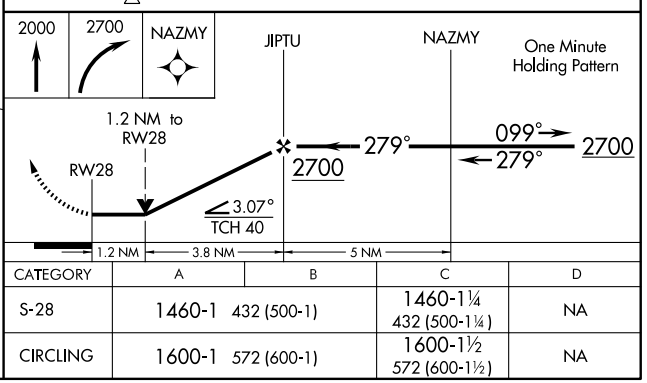
NA

MISSED APPROACH: Climb to 2000 then climbing right turn to 2700 direct NAZMY WP and hold.

AWOS-3	MINNEAPOLIS APP CON	UNICOM
128.325	126.5 357.4	122.8 (CTAF)







CATEGORY	A	B	C	D
S-28	1460-1 432 (500-1)		1460-1¼ 432 (500-1¼)	NA
CIRCLING	1600-1 572 (600-1)		1600-1½ 572 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VORTAC DWN 109.0 Chan 27	APP CRS 239°	Rwy Idg N/A TDZE N/A Apt Elev 1028

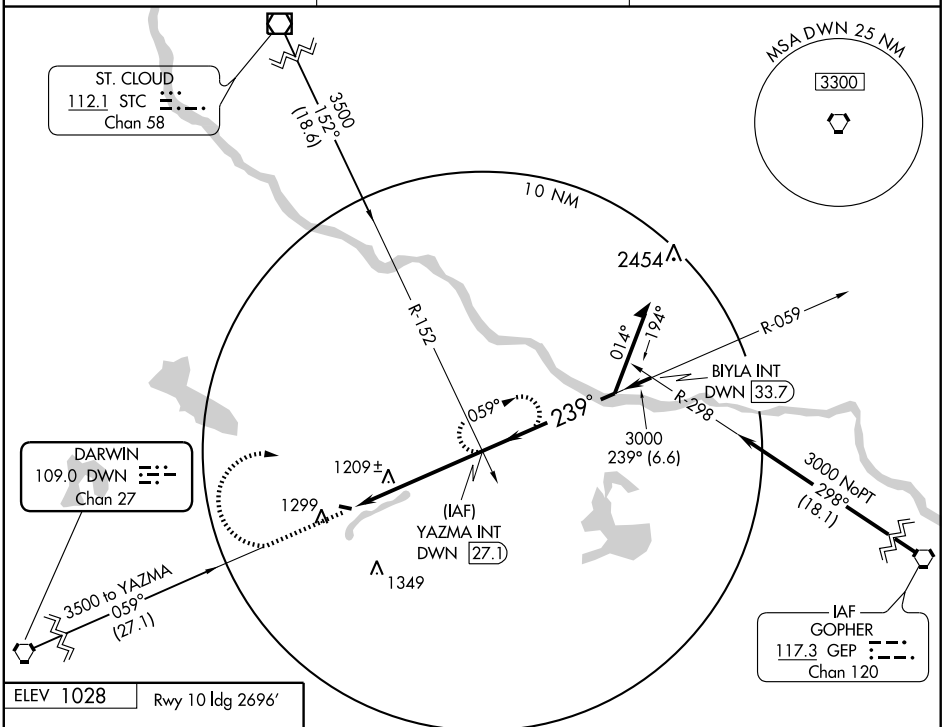
VOR-A

MAPLE LAKE MUNI (MGG)

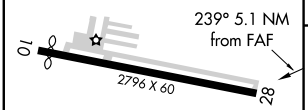
⚠ If local altimeter setting not received, use St. Cloud Regional altimeter setting and increase all MDAs 60 feet.

MISSED APPROACH: Climb to 2000, then climbing right turn to 3500 via DWN R-059 to YAZMA INT/27.1 DME and hold.

AWOS-3	MINNEAPOLIS APP CON	UNICOM
128.325	126.5 357.4	122.8 (CTAF)



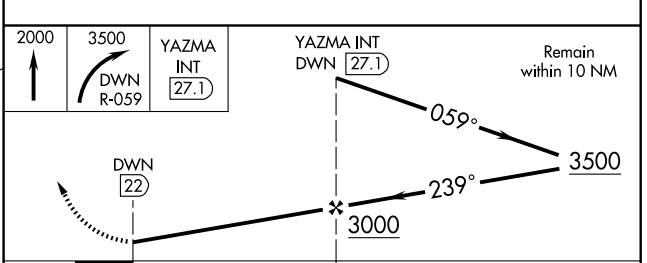
ELEV 1028 Rwy 10 Idg 2696′



MIRL Rwy 10-28

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

2000	3500	YAZMA INT 27.1
	DWN R-059	

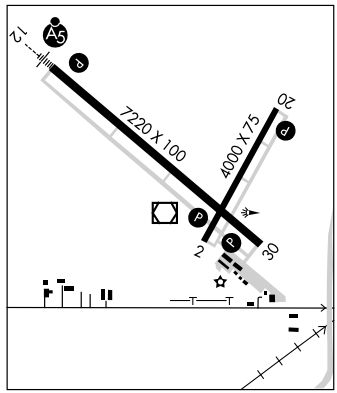


CATEGORY	A	B	C	D
CIRCLING	1660-1 632 (700-1)	1660-1¼ 632 (700-1¼)	1660-1¾ 632 (700-1¾)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

MARSHALL

SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FLD (MML) 1 W UTC−6(−5DT) OMAHA
N44°27.10′ W95°49.47′ H–2I, L–12I
1183 B S4 **FUEL** 100LL, JET A NOTAM FILE MML IAP
RWY 12–30: H7220X100 (ASPH) S–30, D–45 HIRL
RWY 12: MALSR. PAPI(P4L)—GA 3.0° TCH 50′.
RWY 30: REIL. PAPI(P4L)—GA 3.0° TCH 32′. Pole.
RWY 02–20: H4000X75 (ASPH) MIRL
RWY 02: REIL. PAPI(P4L)—GA 3.0° TCH 32′.
RWY 20: REIL. PAPI(P4L)—GA 3.0° TCH 32′. Road.
AIRPORT REMARKS: Attended Mon–Thu 1400–0000Z‡, Fri 1400–2300Z‡. For svc after hrs call 507–532–3164. Rwy 12 MALSR OTS indef. ACTIVATE MIRL Rwy 02–20, HIRL Rwy 12–30, PAPI Rwy 02, Rwy 20, Rwy 12 and Rwy 30, REIL Rwy 02, Rwy 20, and Rwy 30, MALSR Rwy 12—CTAF.
WEATHER DATA SOURCES: AWOS–3 111.0 MML (507) 532–5269.
COMMUNICATIONS: CTAF/UNICOM 122.8
MARSHALL RCO 122.35 (PRINCETON RADIO)
MINNEAPOLIS CENTER APP/DEP CON 127.1
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE MML.
MARSHALL (T) VORW/DME 111.0 MML Chan 47 N44°26.90′ W95°49.49′ at fld. 1180/5E. **AWOS–3**. Unmonitored.
GARNO NDB (LOM) 253 GB N44°30.11′ W95°54.66′ 124° 4.8 NM to fld.
ILS 109.7 I–GBY Rwy 12. LOM GARNO NDB.



MARSHALL N44°26.91′ W95°49.90′ NOTAM FILE MML. OMAHA
(T) VORW/DME 111.0 MML Chan 47 at Southwest Minnesota Rgnl Marshall/Ryan Fld L–12I
1180/5E **AWOS–3** Unmonitored.
RCO 122.35 (PRINCETON RADIO)

McGREGOR

ISEDOR IVERSON (HZX) 1 N UTC−6(−5DT) N46°37.13′ W93°18.59′ TWIN CITIES
1228 B **FUEL** 100LL, MOGAS NOTAM FILE HZX L–14H
RWY 14–32: H3400X75 (ASPH) MIRL IAP
RWY 14: VASI (V2L) **RWY 32:** VASI (V2R)
AIRPORT REMARKS: Unattended. Fuel 24hr credit card fuel avbl. Ultralights on and invof arpt. ACTIVATE MIRL Rwy 14–32 and VASI Rwy 14 and Rwy 32—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.575 (218) 768–2593.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 127.9
RADIO AIDS TO NAVIGATION: NOTAM FILE DLH.
DULUTH (H) VORTACW 112.6 DLH Chan 73 N46°48.13′ W92°12.17′ 252° 47 NM to fld. 1428/5E.

MILACA MUNI (18Y) 2 NE UTC−6(−5DT) N45°46.35′ W93°37.93′ TWIN CITIES
1100 B S3 **FUEL** 100LL NOTAM FILE PNM
RWY 16–34: 2900X150 (TURF) LIRL (NSTD)
RWY 16: Trees. **RWY 34:** Trees.
AIRPORT REMARKS: Unattended. For svc call 320–938–2381. Ultralight traffic on and invof arpt. Rwy 16–34 NSTD LIRL, spacing. Rwy 34 marked with yellow cones.
COMMUNICATIONS: CTAF 122.9

APP CRS	Rwy Idg	7220
305°	TDZE	1180
	Apt Elev	1180

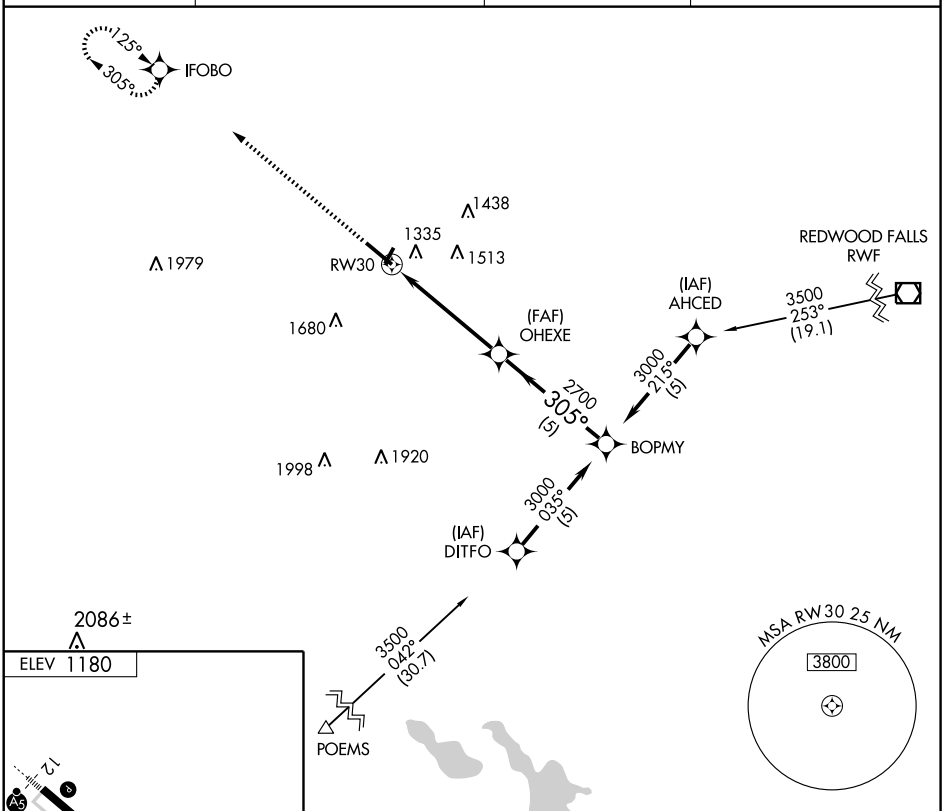
GPS RWY 30

MARSHALL/ SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FIELD (MML)

NA

MISSED APPROACH: Climb to 3000 direct IFOBO WP and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
111.0	127.1 290.2	121.725	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-30	1580-1 400 (400-1)			1580-1¼ 400 (400-1¼)
CIRCLING	1640-1 460 (500-1)		1640-1½ 460 (500-1½)	1740-2 560 (600-2)

HIRL Rwy 12-30 L
REIL Rwys 2-20 and 30 L
MIRL Rwy 2-20 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC I-GBY	APP CRS	Rwy Idg	7220
109.7	125°	TDZE	1182
		Apt Elev	1182

ILS or LOC RWY 12

MARSHALL/ SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FIELD (MML)

ADF required.
When local altimeter setting not received, use Tracy Muni altimeter setting and increase all DAs/MDAs 60 feet and S-LOC 12 Cats C/D visibility ¼ mile.
For inoperative MALSR when using Tracy Muni altimeter setting, increase S-ILS 12 visibility to 1 mile all Cats.

NA

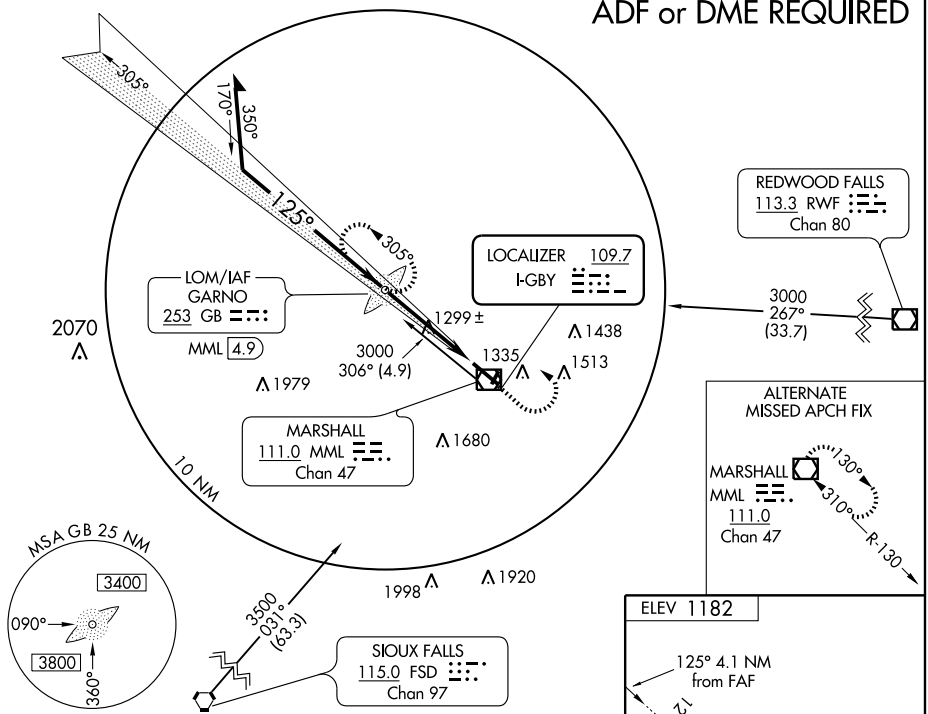
MALSR

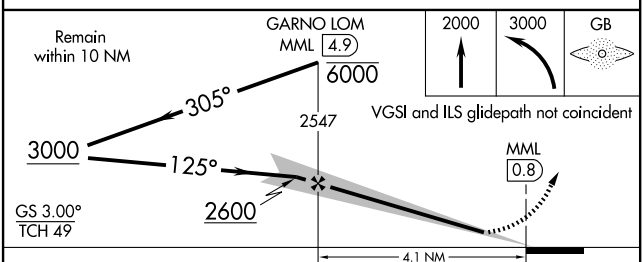
MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct GARNO LOM/MML 4.9 DME and hold.

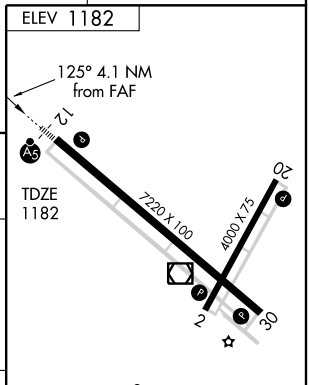
AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
111.0	127.1 290.2	121.725	122.8 (CTAF) L

NC-1, 21 OCT 2010 to 18 NOV 2010

ADF or DME REQUIRED







CATEGORY	A	B	C	D
S-ILS 12	1382-½ 200 (200-½)			
S-LOC 12	1560-½ 378 (400-½)			1560-¾ 378 (400-¾)
CIRCLING	1640-1 458 (500-1)		1640-1½ 458 (500-1½)	1740-2 558 (600-2)

HIRL Rwy 12-30 L
REIL Rwys 2-20 and 30 L
MIRL Rwy 2-20 L

FAF to MAP 4.1 NM					
Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

WAAS	APP CRS	Rwy Idg	7220
CH 82106	125°	TDZE	1182
W12A		Apt Elev	1182

RNAV (GPS) RWY 12

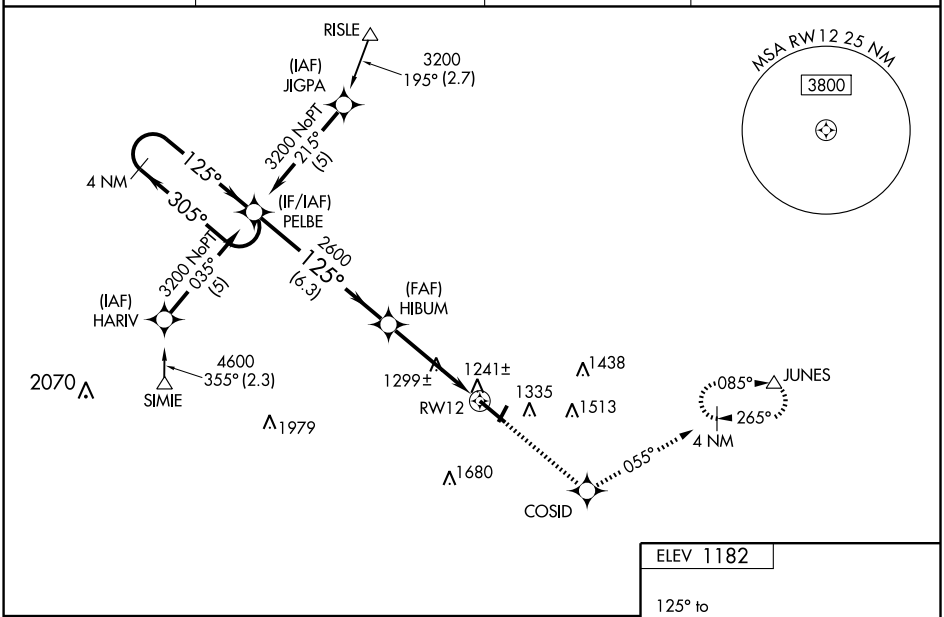
MARSHALL/ SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FIELD (MML)

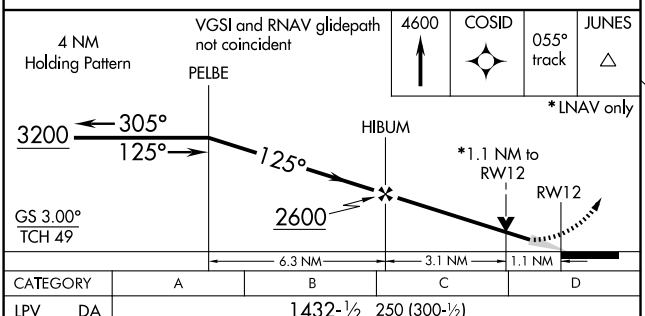
T DME/DME RNP-0.3 NA.
A When local altimeter setting not received, use Tracy Muni altimeter setting and increase all DAs/MDAs 60 feet and LNAV Cat. C visibility ¼ mile.
W VDP and Baro-VNAV NA when using Tracy Muni altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F).
For inoperative MALSR when using Tracy Muni altimeter setting, increase LPV visibility to 1 mile all Cats.
For inoperative MALSR, increase LNAV Cat. D visibility to 1¼ mile.

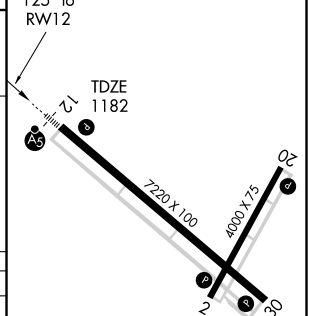
MALSR

MISSED APPROACH: Climb to 4600, direct COSID and via 055° track to JUNES and hold, continue climb-in-hold to 4600.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
111.0	127.1 290.2	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1432-½ 250 (300-½)			
LNAV/ VNAV DA	1511-¾ 329 (400-¾)			
LNAV MDA	1560-½ 378 (400-½)			1560-1 378 (400-1)
CIRCLING	1640-1 458 (500-1)		1640-1½ 458 (500-1½)	1740-2 558 (600-2)

HIRL Rwy 12-30 L
REIL Rwys 2-20 and 30 L
MIRL Rwy 2-20 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME MML	APP CRS	Rwy Idg	7220
111.0	298°	TDZE	1180
Chan 47		Apt Elev	1180

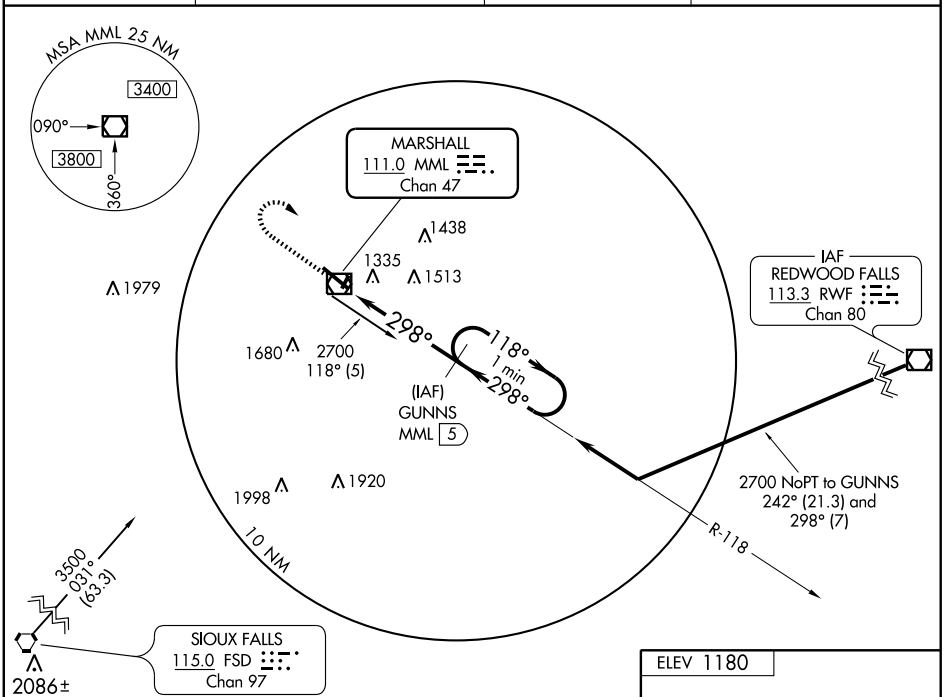
VOR/DME RWY 30

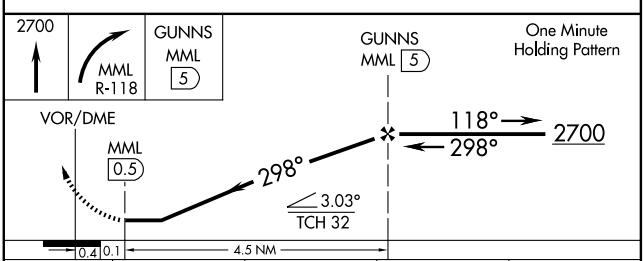
MARSHALL/
SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FIELD (MML)

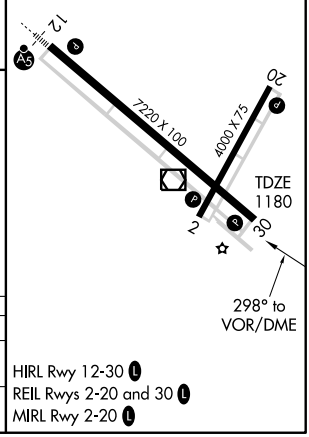
When local altimeter setting not received, use Tracy altimeter setting and increase all MDA 60 feet. Increase S-30 Cat D visibility ¼ mile.

MISSED APPROACH: Climb to 2700, then right turn via MML VOR/DME R-118 to GUNNS/MML 5 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
111.0	127.1 290.2	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-30	1600-1 420 (500-1)		1600-1¼ 420 (500-1¼)	
CIRCLING	1640-1 460 (500-1)		1640-1½ 460 (500-1½)	1740-2 560 (600-2)

HIRL Rwy 12-30 L
REIL Rwys 2-20 and 30 L
MIRL Rwy 2-20 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME MML	APP CRS	Rwy Idg	7220
111.0	130°	TDZE	1182
Chan 47		Apt Elev	1182

MARSHALL/
SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FIELD (MML)

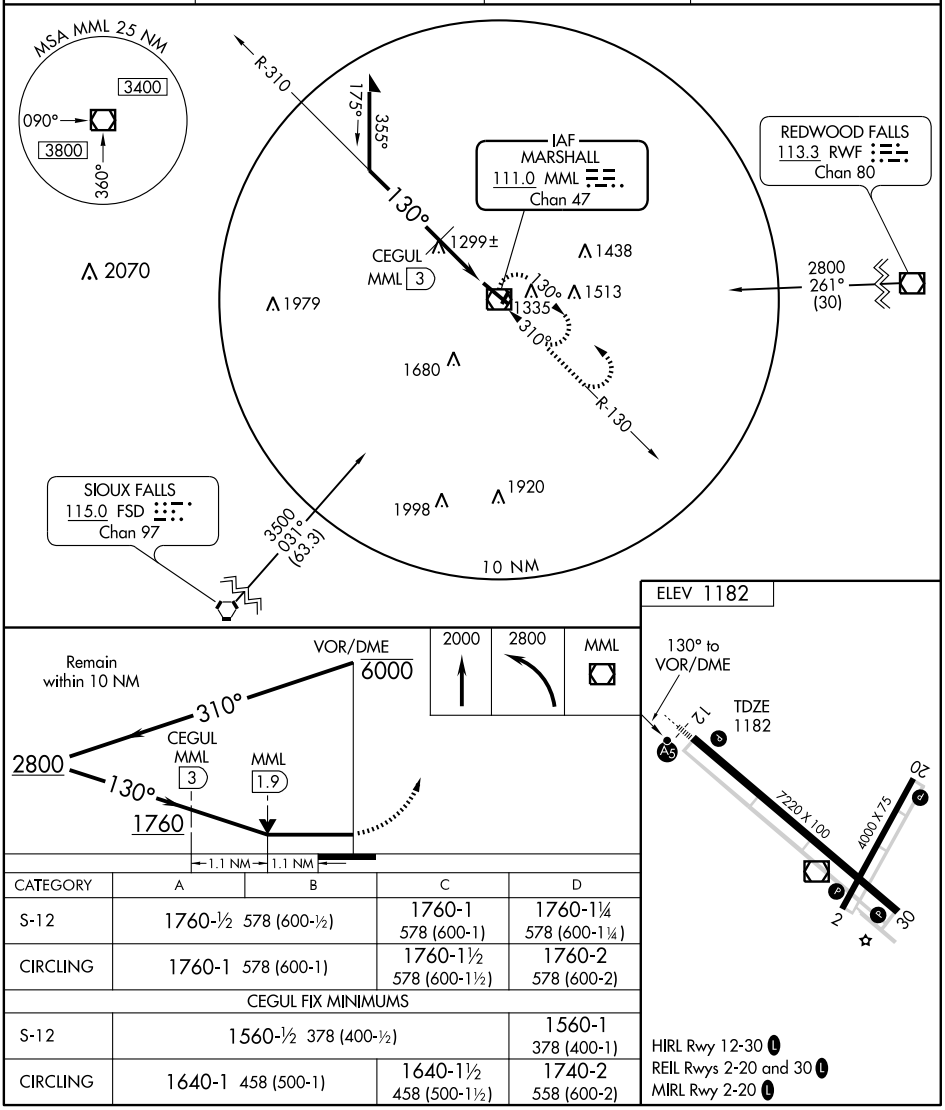
VOR RWY 12

T A For inoperative MALSR, increase CEGUL FIX MINIMUMS S-12 Cat. D visibility to 1¼ mile.
When local altimeter setting not received, use Tracy Muni altimeter setting and increase all MDAs 60 feet and S-12 Cat. C/D visibility ¼ mile; increase Circling Cat. C visibiltiy ¼ mile. Increase CEGUL FIX MINIMUMS S-12 Cat. C visibility to ¾ mile.
VDP NA when using Tracy Muni altimeter setting.

MALSR

MISSED APPROACH: Climb to 2000, then climbing left turn to 2800 direct MML VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
111.0	127.1 290.2	121.725	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-12	1760-½ 578 (600-½)		1760-1 578 (600-1)	1760-1¼ 578 (600-1¼)
CIRCLING	1760-1 578 (600-1)		1760-1½ 578 (600-1½)	1760-2 578 (600-2)
CEGUL FIX MINIMUMS				
S-12	1560-½ 378 (400-½)			1560-1 378 (400-1)
CIRCLING	1640-1 458 (500-1)		1640-1½ 458 (500-1½)	1740-2 558 (600-2)

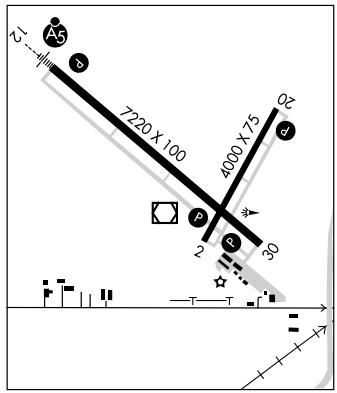
HIRL Rwy 12-30 L
REIL Rwys 2-20 and 30 L
MIRL Rwy 2-20 L

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

MARSHALL

SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FLD (MML) 1 W UTC−6(−5DT) OMAHA
N44°27.10′ W95°49.47′ H–2I, L–12I
1183 B S4 **FUEL** 100LL, JET A NOTAM FILE MML IAP
RWY 12–30: H7220X100 (ASPH) S–30, D–45 HIRL
RWY 12: MALSR. PAPI(P4L)—GA 3.0° TCH 50′.
RWY 30: REIL. PAPI(P4L)—GA 3.0° TCH 32′. Pole.
RWY 02–20: H4000X75 (ASPH) MIRL
RWY 02: REIL. PAPI(P4L)—GA 3.0° TCH 32′.
RWY 20: REIL. PAPI(P4L)—GA 3.0° TCH 32′. Road.
AIRPORT REMARKS: Attended Mon–Thu 1400–0000Z‡, Fri 1400–2300Z‡. For svc after hrs call 507–532–3164. Rwy 12 MALSR OTS indef. ACTIVATE MIRL Rwy 02–20, HIRL Rwy 12–30, PAPI Rwy 02, Rwy 20, Rwy 12 and Rwy 30, REIL Rwy 02, Rwy 20, and Rwy 30, MALSR Rwy 12—CTAF.
WEATHER DATA SOURCES: AWOS–3 111.0 MML (507) 532–5269.
COMMUNICATIONS: CTAF/UNICOM 122.8
MARSHALL RCO 122.35 (PRINCETON RADIO)
MINNEAPOLIS CENTER APP/DEP CON 127.1
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE MML.
MARSHALL (T) VORW/DME 111.0 MML Chan 47 N44°26.90′ W95°49.49′ at fld. 1180/5E. **AWOS–3**. Unmonitored.
GARNO NDB (LOM) 253 GB N44°30.11′ W95°54.66′ 124° 4.8 NM to fld.
ILS 109.7 I–GBY Rwy 12. LOM GARNO NDB.



MARSHALL N44°26.91′ W95°49.90′ NOTAM FILE MML. OMAHA
(T) VORW/DME 111.0 MML Chan 47 at Southwest Minnesota Rgnl Marshall/Ryan Fld L–12I
1180/5E **AWOS–3** Unmonitored.
RCO 122.35 (PRINCETON RADIO)

McGREGOR

ISEDOR IVERSON (HZX) 1 N UTC−6(−5DT) N46°37.13′ W93°18.59′ TWIN CITIES
1228 B **FUEL** 100LL, MOGAS NOTAM FILE HZX L–14H
RWY 14–32: H3400X75 (ASPH) MIRL IAP
RWY 14: VASI (V2L) **RWY 32:** VASI (V2R)
AIRPORT REMARKS: Unattended. Fuel 24hr credit card fuel avbl. Ultralights on and invof arpt. ACTIVATE MIRL Rwy 14–32 and VASI Rwy 14 and Rwy 32—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.575 (218) 768–2593.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 127.9
RADIO AIDS TO NAVIGATION: NOTAM FILE DLH.
DULUTH (H) VORTACW 112.6 DLH Chan 73 N46°48.13′ W92°12.17′ 252° 47 NM to fld. 1428/5E.

MILACA MUNI (18Y) 2 NE UTC−6(−5DT) N45°46.35′ W93°37.93′ TWIN CITIES
1100 B S3 **FUEL** 100LL NOTAM FILE PNM
RWY 16–34: 2900X150 (TURF) LIRL (NSTD)
RWY 16: Trees. **RWY 34:** Trees.
AIRPORT REMARKS: Unattended. For svc call 320–938–2381. Ultralight traffic on and invof arpt. Rwy 16–34 NSTD LIRL, spacing. Rwy 34 marked with yellow cones.
COMMUNICATIONS: CTAF 122.9

APP CRS	Rwy Idg	3400
139°	TDZE	1228
	Apt Elev	1228

RNAV (GPS) RWY 14

MC GREGOR/ISEDOR IVERSON (HZX)

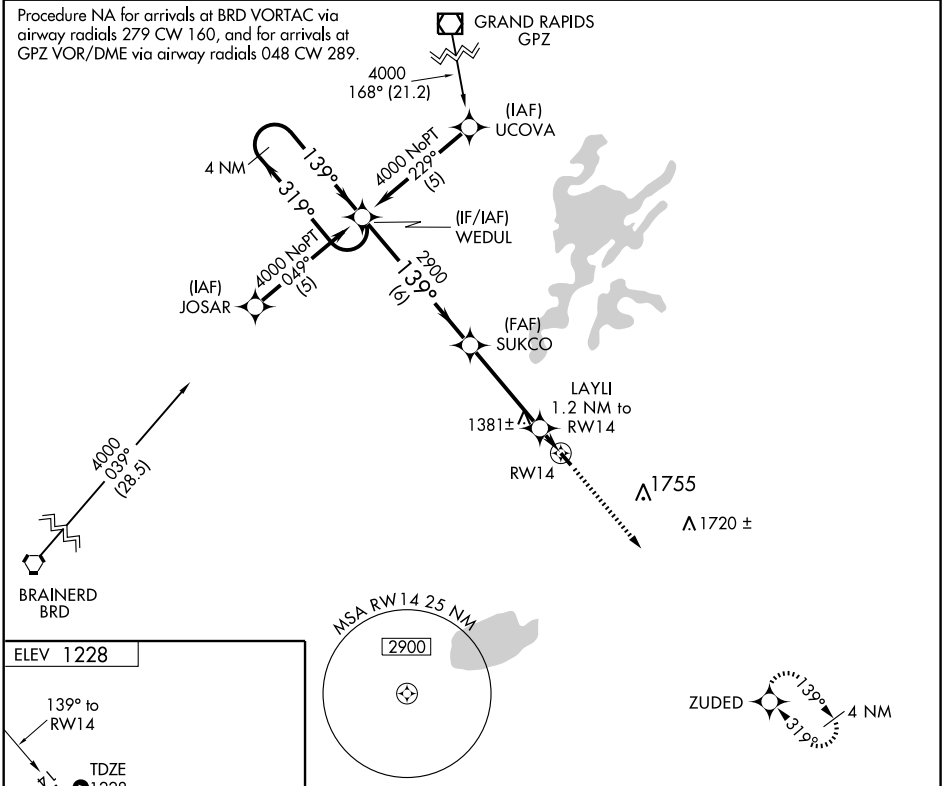
NA

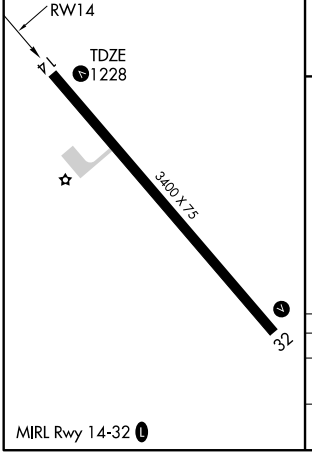
DME/DME RNP- 0.3 NA.
If local altimeter setting not received, use Aitkin altimeter setting and increase all MDAs 40 feet.
Procedure NA at night.

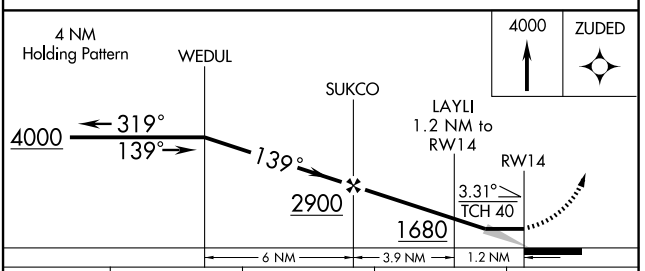
MISSED APPROACH: Climb to 4000 direct ZUDED and hold.

ASOS-3	MINNEAPOLIS CENTER	CTAF
119.575	127.9 281.45	122.9 L

Procedure NA for arrivals at BRD VORTAC via airway radials 279 CW 160, and for arrivals at GPZ VOR/DME via airway radials 048 CW 289.







CATEGORY	A	B	C	D
LNAV MDA	1580-1 352 (400-1)		NA	
CIRCLING	1660-1 432 (500-1)	1680-1 452 (500-1)	NA	

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 32

MC GREGOR/ ISEDOR IVERSON (HZX)

APP CRS	Rwy Idg	3400
319°	TDZE	1226
	Apt Elev	1228

NA

DME/DME RNP- 0.3 NA.
If local altimeter setting not received, use Aitkin altimeter setting and increase all MDAs 40 feet.
Procedure NA at night.

MISSED APPROACH: Climb to 4000 direct WEDUL and hold.

ASOS-3	MINNEAPOLIS CENTER	CTAF
119.575	127.9 281.45	122.9 L

Procedure NA for arrivals at LINDR via V218 southbound.

4 NM 139° 319° WEDUL

RW32 1755

PICIK 2.3 NM to RW32 ∧1720 ±

(FAF) WOXER 2900 (6) 319°

(IAF) KETEY 4000 NoPT 229° (5)

4000 269° (32.7) BARUM

(IF/IAF) ZUDED 139° 319° 4 NM

(IAF) WIBIL 4000 NoPT 049° (5)

4000 028° (17.7) LINDR

MSA RW32 25 NM 2900

ELEV 1228

3400 X 75

TDZE 1226

32

319° to RW32

MIRL Rwy 14-32 L

4000 WEDUL

VDP NA with Aitkin altimeter setting.

4 NM Holding Pattern

ZUDED WOXER PICIK 2.3 NM to RW32 1 NM to RW32 RW32

3.04° TCH 40

319° 139° 319° 4000

2900 2000

1 NM 1.3 NM 2.8 NM 6 NM

CATEGORY	A	B	C	D
LNAV MDA	1600-1 374 (400-1)		NA	
CIRCLING	1660-1 432 (500-1)	1680-1 452 (500-1)	NA	

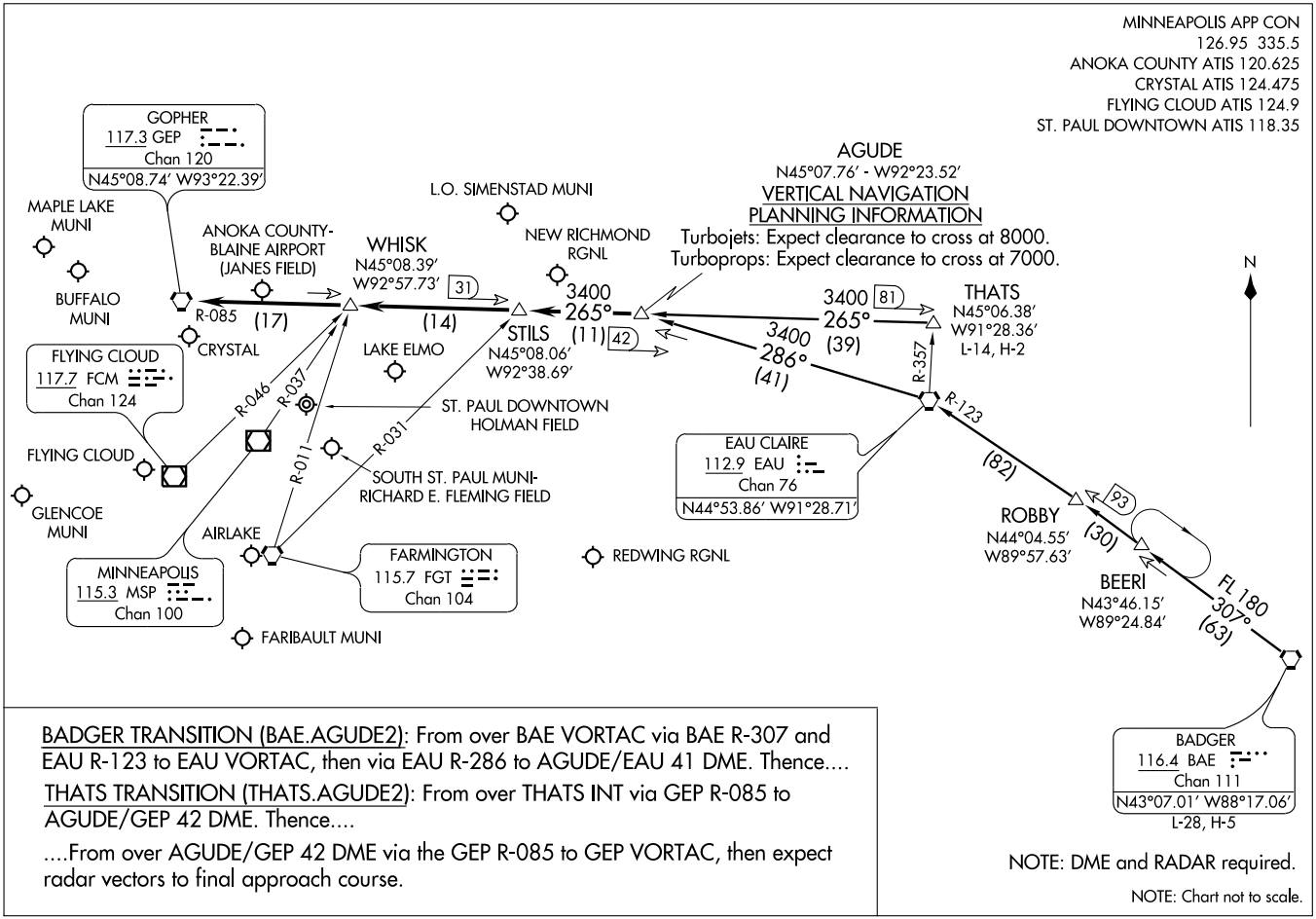
NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

AGUDE TWO ARRIVAL

(AGUDE.AGUDE2) 10154

MINNEAPOLIS-ST. PAUL, MINNESOTA



BADGER TRANSITION (BAE.AGUDE2): From over BAE VORTAC via BAE R-307 and EAU R-123 to EAU VORTAC, then via EAU R-286 to AGUDE/EAU 41 DME. Thence....

THATS TRANSITION (THATS.AGUDE2): From over THATS INT via GEP R-085 to AGUDE/GEP 42 DME. Thence....

....From over AGUDE/GEP 42 DME via the GEP R-085 to GEP VORTAC, then expect radar vectors to final approach course.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

(AGUDE.AGUDE2) 10154

AGUDE TWO ARRIVAL

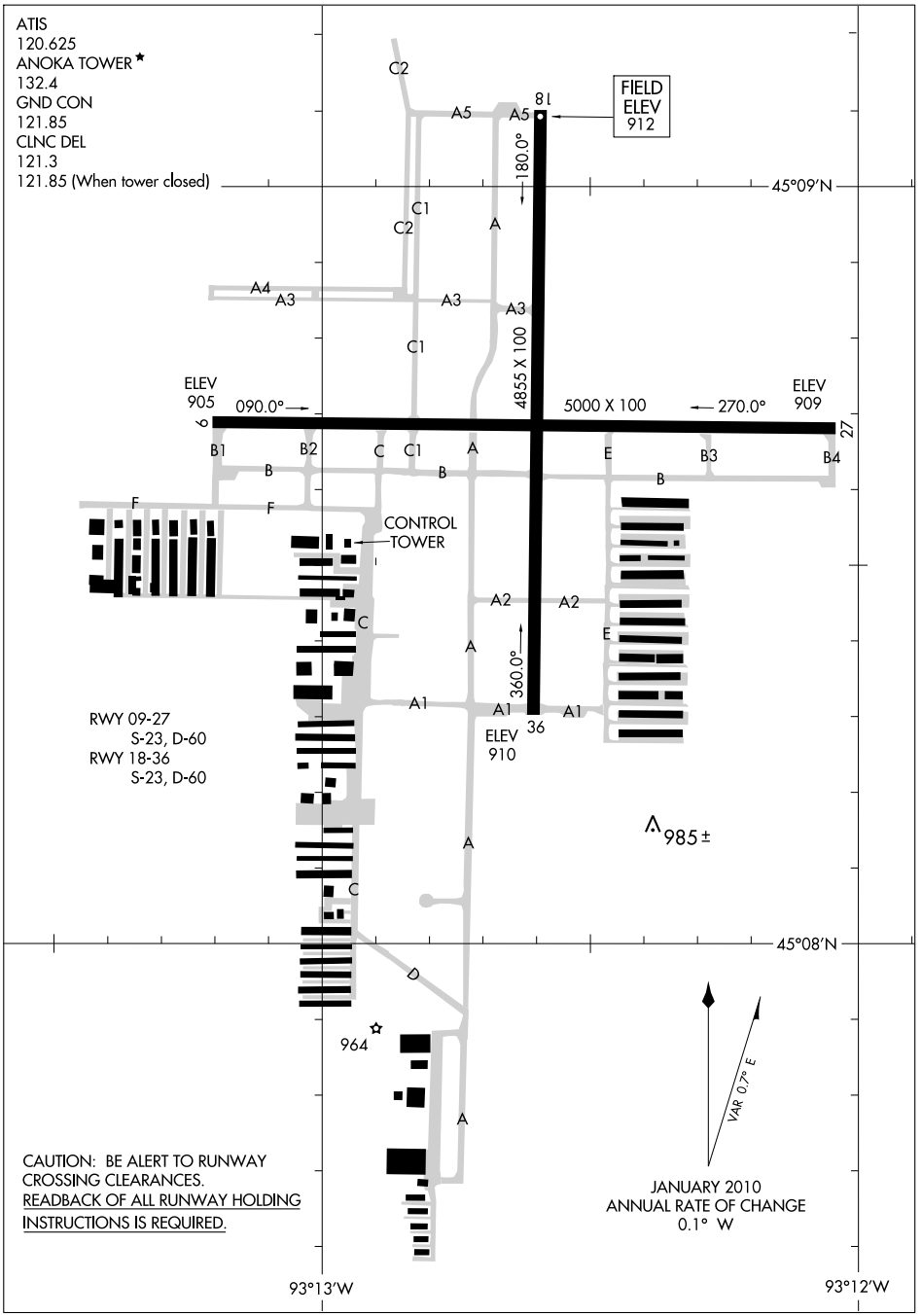
ST-263 (FAA)

MINNEAPOLIS-ST. PAUL, MINNESOTA

AIRPORT DIAGRAM

AL-5202 (FAA)

MINNEAPOLIS, MINNESOTA



AIRPORT DIAGRAM
MINNEAPOLIS, MINNESOTA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

MINNEAPOLIS

AIRLAKE (LVN) 2 SE UTC−6(−5DT) N44°37.67′ W93°13.69′

TWIN CITIES
L–12J, 14I, A
IAP

960 B S4 **FUEL** 100LL, JET A OX 4 TPA—1760(800) NOTAM FILE LVN

RWY 12–30: H4098X75 (ASPH) S–30, D–80, 2S–102 HIRL

RWY 12: REIL. VASI(V4L)—GA 3.25° TCH 37′. Tree. Rgt tfc.

RWY 30: MALSR. PAPI(P4R)—GA 3.0° TCH 29′. Thld dsplcd 392′. Hill.

AIRPORT REMARKS: Attended Mon–Sat 1300–2300Z‡, Sun 1400–2200Z‡. Maintenance supervisor telephone 612–469–4040 Mon–Fri 1400–2230Z‡. Self service fuel avbl 24 hrs with credit card. Birds on and invof arpt. Hangers 400′ N from centerline in primary surface. Ultralight ops not permitted. ACTIVATE HIRL Rwy 12–30, REIL and VASI Rwy 12, MALSR Rwy 30 and PAPI Rwy 30—CTAF.

WEATHER DATA SOURCES: AWOS–3 118.0 (952) 469–5850.

COMMUNICATIONS: CTAF/UNICOM 123.0

FARMINGTON RCO 122.1R 115.7T (PRINCETON RADIO)

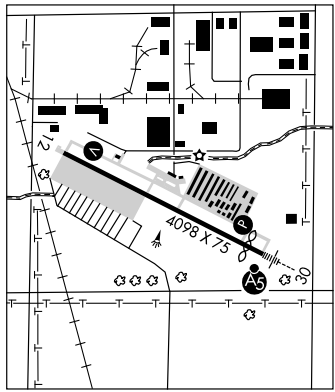
Ⓡ **MINNEAPOLIS APP/DEP CON** 134.7

MINNEAPOLIS CLNC DEL 118.95

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

FARMINGTON (H) VORTAC 115.7 FGT Chan 104 N44°37.86′ W93°10.92′ 259° 2 NM to fld. 972/6E.

ILS 108.9 I–LVN Rwy 30. Unmonitored.



ANOKA CO–BLAINE (JANES FLD) (ANE) 10 N UTC−6(−5DT) N45°08.69′ W93°12.61′

TWIN CITIES
H–2J, L–12J, 14I, A
IAP, AD

912 B S4 **FUEL** 100LL, JET A TPA—1912(1000) NOTAM FILE ANE

RWY 09–27: H5000X100 (ASPH) S–23, D–60 HIRL

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 25′. Tree.

RWY 27: MALSR. PAPI(P4L)—GA 3.0° TCH 50′. Trees.

RWY 18–36: H4855X100 (ASPH) S–23, D–60 MIRL

RWY 18: REIL. VASI(V4L)—GA 3.0° TCH 50′. Tree.

RWY 36: REIL. VASI(V4L)—GA 3.0° TCH 50′.

AIRPORT REMARKS: Attended 1300–0400Z‡. Deer and waterfowl on and invof arpt. Rwy 09–27 trees +20′ north side in primary surface. Noise abatement procedures in effect. Ctc arpt manager for details at 612–725–6327. ACTIVATE HIRL Rwy 09–27, MIRL Rwy 18–36, REIL Rwy 09, Rwy 18, and Rwy 36, VASI Rwy 18 and Rwy 36 PAPI Rwy 09 and Rwy 27 and MALSR Rwy 27—CTAF.

WEATHER DATA SOURCES: AWOS–3 120.625 (763) 780–9025. LAWRS.

COMMUNICATIONS: CTAF 132.4 **ATIS** 120.625 **UNICOM** 122.95

RCO 122.55 (PRINCETON RADIO)

Ⓡ **MINNEAPOLIS APP/DEP CON** 126.5

MINNEAPOLIS CLNC DEL 121.85

TOWER 132.4 (Oct–Apr 1300–0300Z‡, May–Sep 1300–0400Z‡)

GND CON 121.85 **CLNC DEL** 121.3

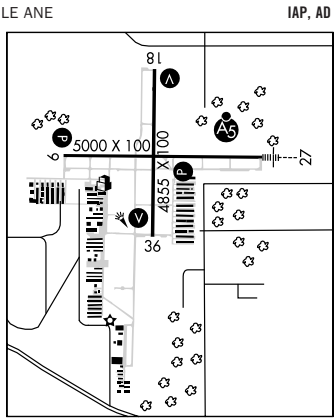
AIRSPACE: CLASS D svc Oct–Apr 1300–0300Z‡, May–Sep 1300–0400Z‡, other times CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

GOPHER (H) VORTACW 117.3 GEP Chan 120 N45°08.74′ W93°22.39′ 084° 6.9 NM to fld. 877/6E. HIWAS.

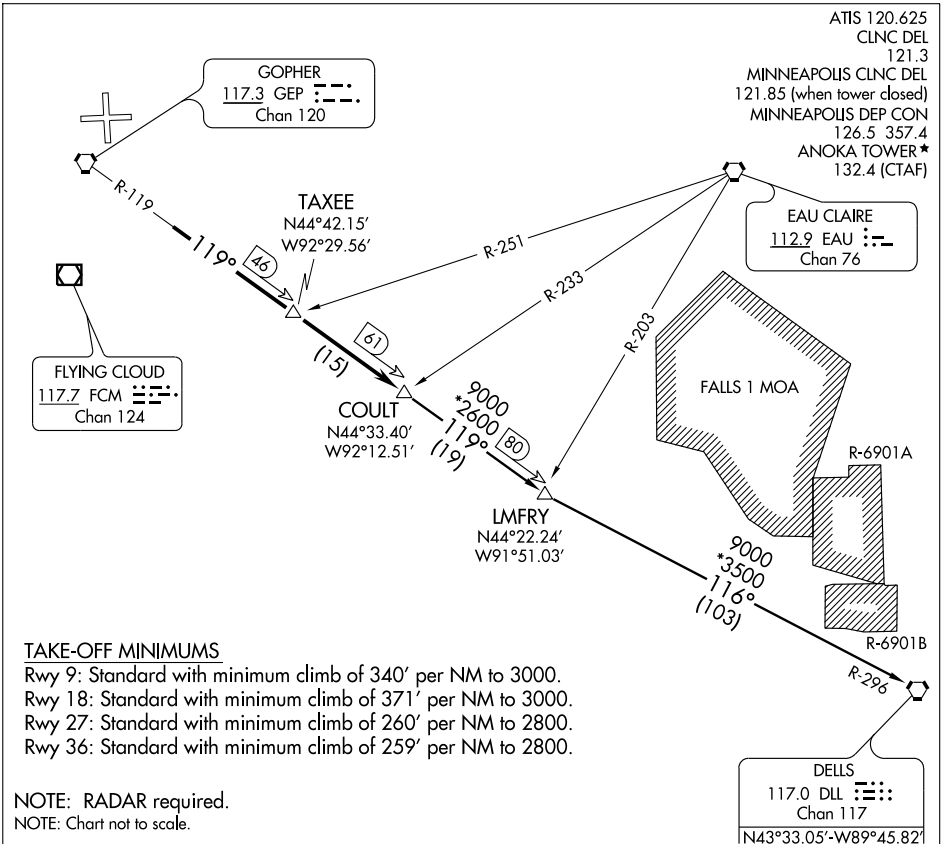
ILS/DME 111.15 I–ANE Chan 48(Y) Rwy 27.

COMM/NAV/WEATHER REMARKS: Minneapolis apch provides CLNC DEL on 121.85 when Anoka Co–Blaine twr clsd.



COULT THREE DEPARTURE

SL-5202 (FAA) MINNEAPOLIS, MINNESOTA



TAKE-OFF MINIMUMS

Rwy 9: Standard with minimum climb of 340' per NM to 3000.
Rwy 18: Standard with minimum climb of 371' per NM to 3000.
Rwy 27: Standard with minimum climb of 260' per NM to 2800.
Rwy 36: Standard with minimum climb of 259' per NM to 2800.

NOTE: RADAR required.
NOTE: Chart not to scale.

TAKE-OFF OBSTACLE NOTES

RWY 9: Tank and multiple trees beginning 822' from DER, 619' right of centerline, up to 170' AGL/1082' MSL. Trees 2248' from DER, 966' left of centerline, 100' AGL/1009' MSL.
RWY18: Aircraft on taxiway 36' from DER, 481' right of centerline, up to 21' AGL/928' MSL. Multiple trees beginning 406' from DER, 287' left of centerline, up to 49' AGL/959' MSL. Tower 5016'drom DER, 201' left of centerline, 120' AGL/1078' MSL.
RWY 27: Multiple trees beginning 7' from DER, 235' right of centerline, up to 83' AGL/983' MSL. Multiple trees beginning 558' from DER, 406' left of centerline, up to 57' AGL/957' MSL.
RWY 36: Multiple trees beginning 86' from DER, 10' right of centerline, up to 87' AGL/987' MSL. Multiple trees beginning 1282' from DER, 53' left of centerline, up to 70' AGL/970' MSL.

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to intercept GEP R-119 to COULT INT/GEP 61 DME, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

DELLS TRANSITION (COULT3.DLL): From over COULT INT via GEP R-119 to LMFRY, then via DLL R-296 to DLL VORTAC.

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

DARWIN THREE DEPARTURE

SL-5202 (FAA)

TAKE-OFF MINIMUMS

Rwy 9: Standard with minimum climb of 340' per NM to 3000.
Rwy 18: Standard with minimum climb of 371' per NM to 3000.
Rwy 27: Standard with minimum climb of 260' per NM to 2800.
Rwy 36: Standard with minimum climb of 259' per NM to 2800.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: RADAR required.

NOTE: Chart not to scale.

NC-1, 21 OCT 2010 to 18 NOV 2010

DARWIN THREE DEPARTURE MINNEAPOLIS, MINNESOTA

(DWN3.DWN) 10042 MINNEAPOLIS/ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE)

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to MSP VOR/DME then via MSP R-281 and DWN R-095 to DWN VORTAC, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

ABERDEEN TRANSITION (DWN2.ABR): From over DWN VORTAC via DWN R-271 and ABR R-088 to ABR VOR/DME.

TAKE-OFF OBSTACLE NOTES

RWY 9: Tank and multiple trees 822′ from DER, 619′ right of centerline, up to 170′ AGL/1082′ MSL.
Trees 2248′ from DER, 966′ left of centerline, 100′ AGL/1009′ MSL.

RWY 18: Aircraft on taxiway 36′ from DER, 481′ right of centerline, up to 21′ AGL/928′ MSL.
Multiple trees beginning 406′ from DER, 287′ left of centerline, up to 49′ AGL/959′ MSL.
Tower 5016′ from DER, 201′ left of centerline, 120′ AGL/1078′ MSL.

RWY 27: Multiple trees 7′ from DER, 235′ right of centerline, up to 83′ AGL/983′ MSL.
Multiple trees 558′ from DER, 406′ left of centerline, up to 57′ AGL/957′ MSL.

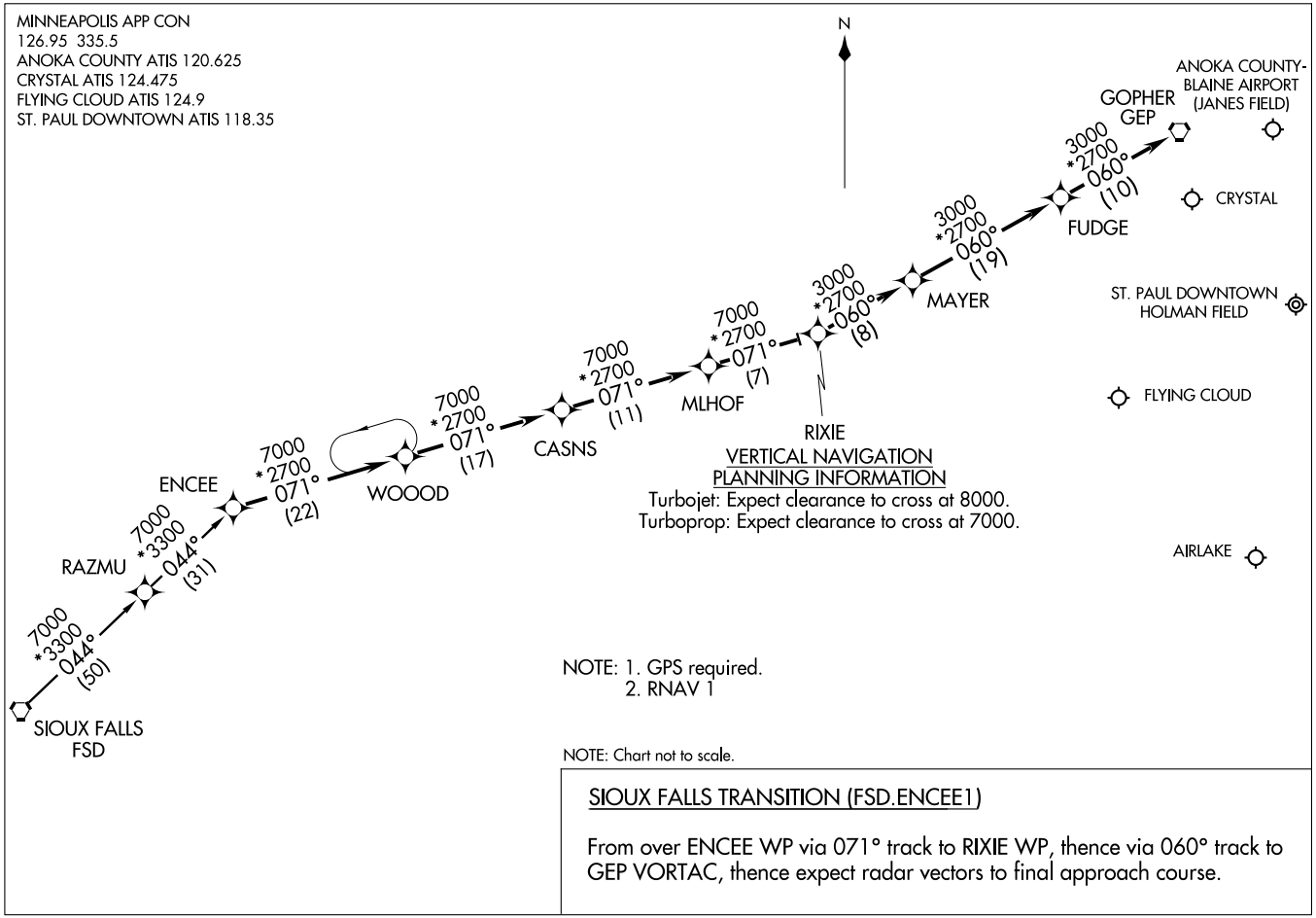
RWY 36: Multiple trees 86′ from DER, 10′ right of centerline, up to 87′ AGL/987′ MSL.
Multiple trees 1282′ from DER, 53′ left of centerline, up to 70′ AGL/970′ MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ENCEE ONE ARRIVAL (RNAV)

(ENCEE.ENCEE1) 07242

MINNEAPOLIS-ST. PAUL, MINNESOTA



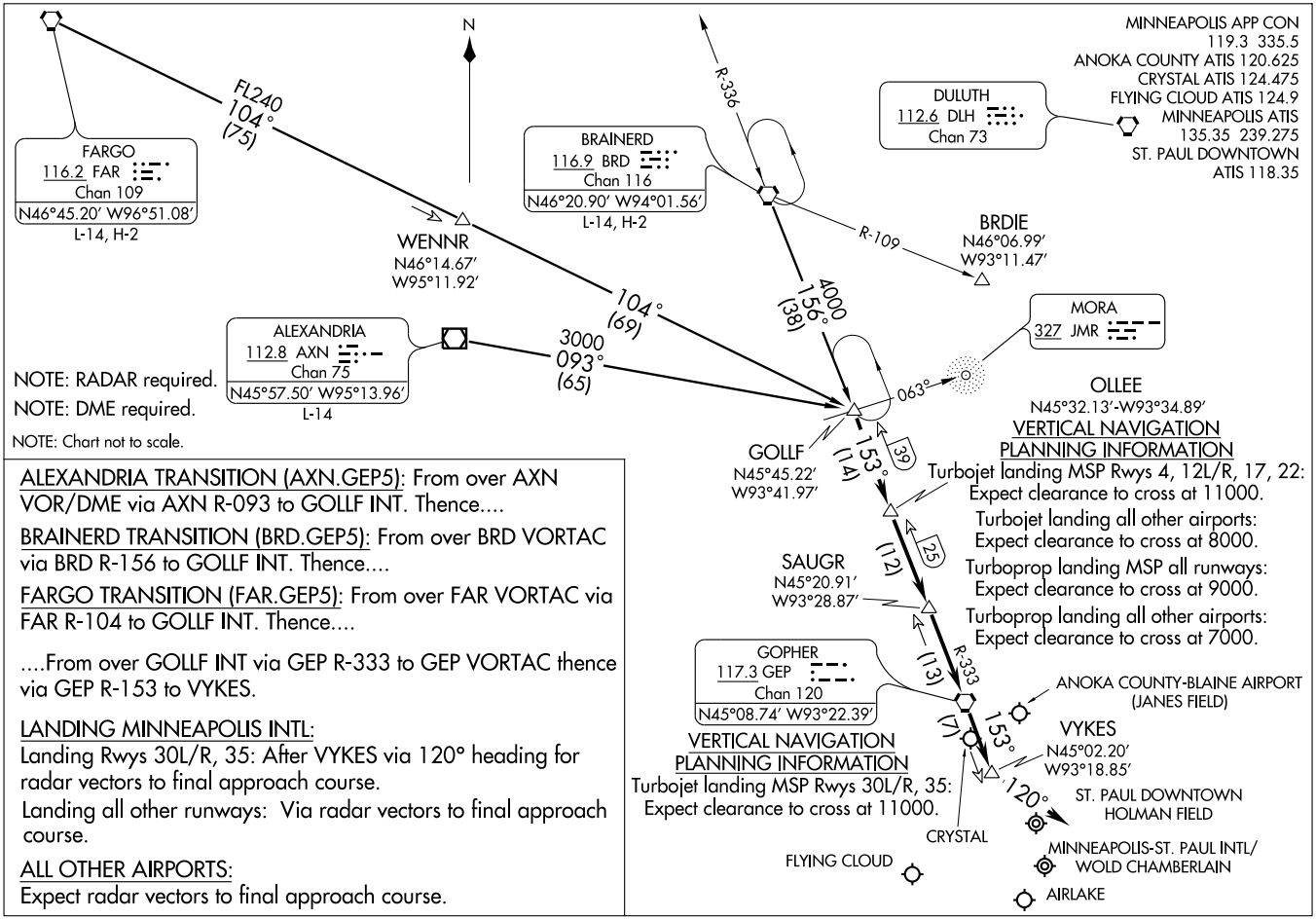
SIOUX FALLS TRANSITION (FSD.ENCEE1)

From over ENCEE WP via 071° track to RIXIE WP, thence via 060° track to GEP VORTAC, thence expect radar vectors to final approach course.

ENCEE ONE ARRIVAL (RNAV)
(ENCEE.ENCEE1) 07242
ST-263 (FAA)
MINNEAPOLIS-ST. PAUL, MINNESOTA

GOPHER FIVE ARRIVAL

(GEP.GEP5) 08157



NOTE: RADAR required.

NOTE: DME required.

NOTE: Chart not to scale.

ALEXANDRIA TRANSITION (AXN.GEP5): From over AXN VOR/DME via AXN R-093 to GOLLF INT. Thence....

BRAINERD TRANSITION (BRD.GEP5): From over BRD VORTAC via BRD R-156 to GOLLF INT. Thence....

FARGO TRANSITION (FAR.GEP5): From over FAR VORTAC via FAR R-104 to GOLLF INT. Thence....

....From over GOLLF INT via GEP R-333 to GEP VORTAC thence via GEP R-153 to VYKES.

LANDING MINNEAPOLIS INTL:

Landing Rwys 30L/R, 35: After VYKES via 120° heading for radar vectors to final approach course.

Landing all other runways: Via radar vectors to final approach course.

ALL OTHER AIRPORTS:

Expect radar vectors to final approach course.

GOPHER FIVE ARRIVAL

(GEP.GEP5) 08157

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA

MINNEAPOLIS, MINNESOTA

LOC/DME I-ANE	APP CRS	Rwy Idg	5000
111.15	269°	TDZE	910
Chan 48 (Y)		Apt Elev	912

MINNEAPOLIS/ ILS or LOC/DME RWY 27
ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE)

If local altimeter setting not received, use Crystal altimeter setting and increase all DAs/MDAs 40 feet.
VDP NA with Crystal altimeter setting.

MALSR

MISSED APPROACH: Climb to 2700 direct GEP VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	ANOKA TOWER★	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
120.625	126.5	132.4 (CTAF) L	121.85	121.3	121.85 (When tower closed)	122.95

ALTERNATE MISSED APCH FIX
2454
149°
329°
PRINCETON PNM 368

Procedure NA for arrivals at BLAYN via V13 northbound, and arrivals at STILS via V78 eastbound.

15 NM

(IAF) BLAYN GEP 23

GEP 23 Arc 3100

R-058

GOPHER 117.3 GEP Chan 120

1530 1061± 1082 1426 LR-079 2600

R-264 084° 264° 1065± 1081± 269° (10.6) 089°

KOGGE I-ANE 3.6 1520 2438

BOKYA I-ANE 6.1

(IF) JUDAL I-ANE 16.7

(IAF) STILS GEP 30.9

GEP R-085

3100 265° (8)

MSA GEP 25 NM 3500

LOCALIZER 111.15 I-ANE Chan 48(Y)

DME REQUIRED

ELEV 912
971±
8l
4855 X 100
967±
TDZE 910
5000 X 100
27
6
269° 5.1 NM from FAF
36
985±
964

HIRL Rwy 9-27 L
MIRL Rwy 18-36 L
REIL Rwys 9, 18, and 36 L

2700 GEP 117.3

Use I-ANE DME when on the localizer course.

I-ANE 1 I-ANE 2.2 KOGGE I-ANE 3.6 BOKYA I-ANE 6.1 JUDAL I-ANE 16.7

2600 1780 269° 2600 3100

Procedure Turn NA

GS 3.00° TCH 49

1.2 NM 1.4 NM 2.5 NM 10.6 NM

CATEGORY	A	B	C	D
S-ILS 27	1110-½ 200 (200-½)			
S-LOC 27	1340-½ 430 (500-½)		1340-¾ 430 (500-¾)	1340-1 430 (500-1)
CIRCLING	1400-1 488 (500-1)		1400-1½ 488 (500-1½)	1480-2 568 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010

KBREW THREE DEPARTURE

(KBREW3.KBREW) 10098

MINNEAPOLIS/ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE)

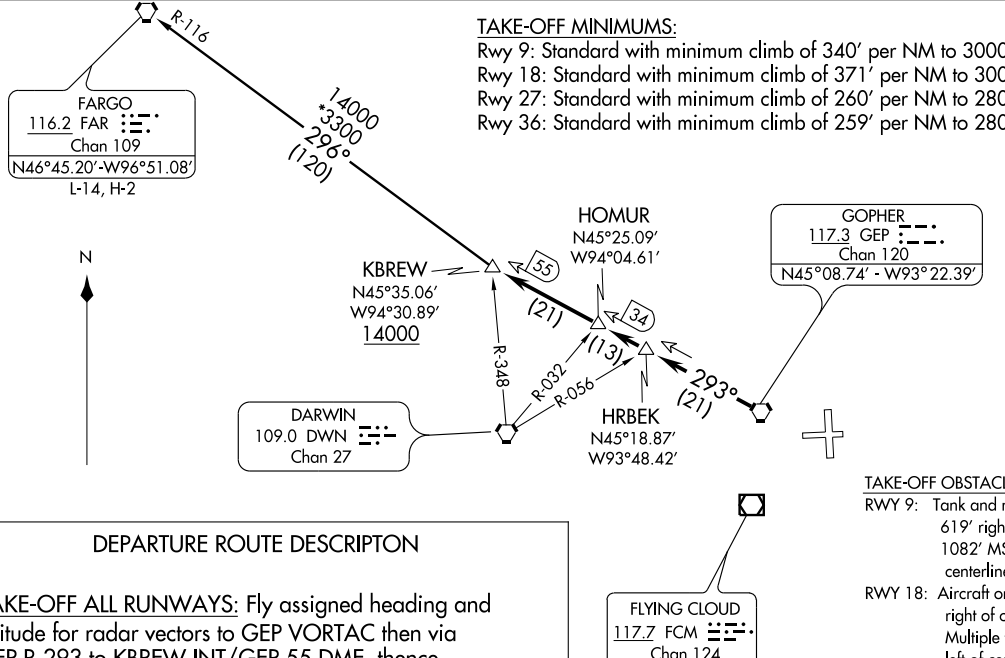
MINNEAPOLIS, MINNESOTA

KBREW THREE DEPARTURE
(KBREW3.KBREW) 10098
MINNEAPOLIS/ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE)
MINNEAPOLIS, MINNESOTA

SL-5202 (FAA)

TAKE-OFF MINIMUMS:
Rwy 9: Standard with minimum climb of 340′ per NM to 3000.
Rwy 18: Standard with minimum climb of 371′ per NM to 3000.
Rwy 27: Standard with minimum climb of 260′ per NM to 2800.
Rwy 36: Standard with minimum climb of 259′ per NM to 2800.

ATIS 120.625
TOWER 132.4
CLNC DEL 121.3
MINNEAPOLIS CLNC DEL 121.85 (when tower closed)
MINNEAPOLIS DEP CON 126.5 357.4



DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to GEP VORTAC then via GEP R-293 to KBREW INT/GEP 55 DME, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

FARGO TRANSITION (KBREW3.FAR):
From over KBREW INT via FAR R-116 to FAR VORTAC.

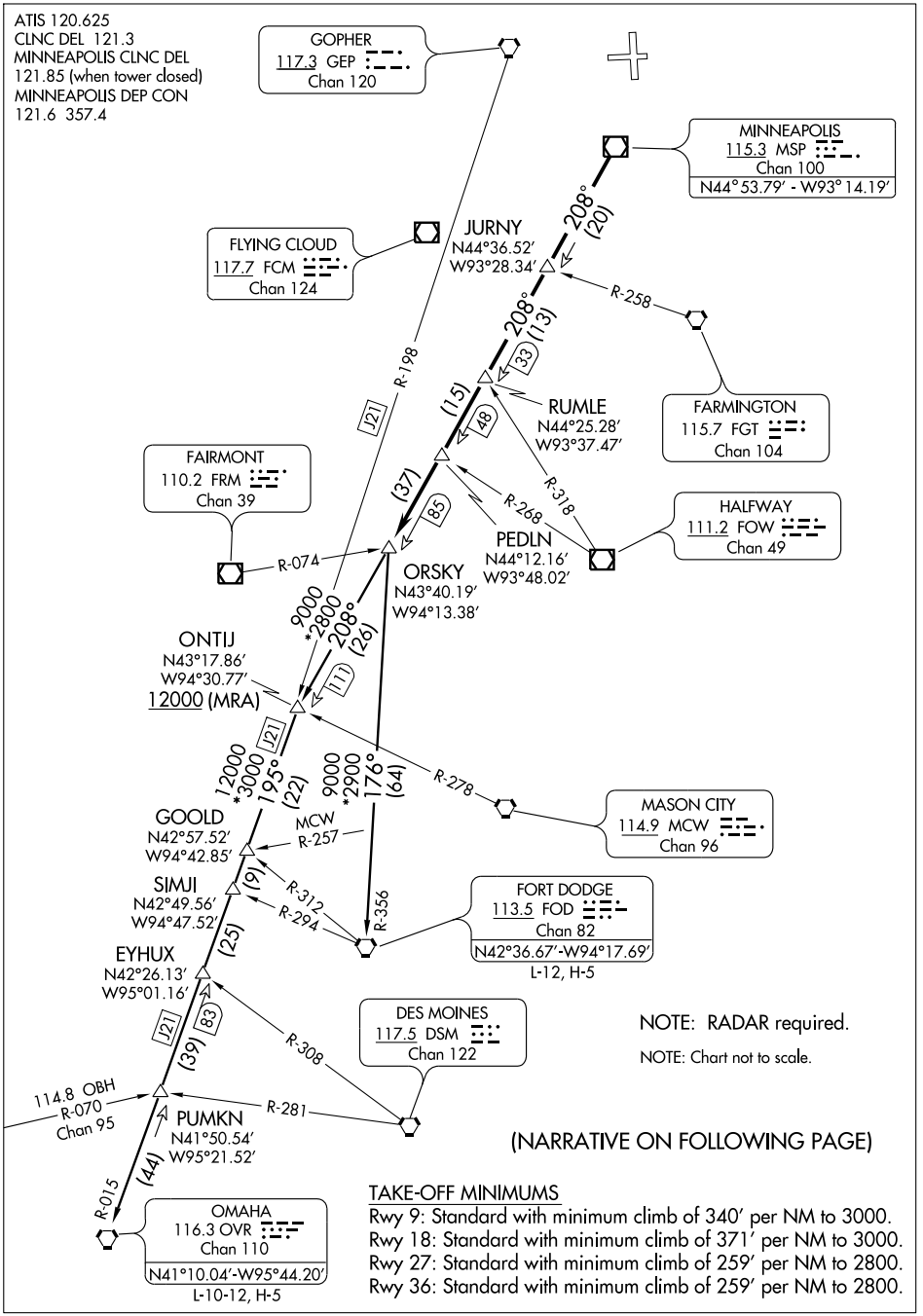
NOTE: RADAR required.
NOTE: Chart not to scale.

TAKE-OFF OBSTACLE NOTES:
RWY 9: Tank and multiple trees beginning 822′ from DER, 619′ right of centerline, up to 170′ AGL/ 1082′ MSL. Trees 2248′ from DER, 966′ left of centerline, 100′ AGL/1009′ MSL.
RWY 18: Aircraft on taxiway 36′ from DER, 481′ right of centerline up to 21′ AGL/ 928′ MSL. Multiple trees beginning 406′ form DER,287′ left of centerline, up to 49′ AGL/ 959′ MSL. Tower 5016′ from DER 201′ left of centerline 120′ AGL/1078′ MSL.
RWY 27: Multiple trees beginning 7′ from DER, 235′ right of centerline, up to 83′ AGL/ 983′ MSL. Multiple trees beginning 558′ from DER, 406′ left of centerline, up to 57′ AGL/ 957′ MSL.
RWY 36: Multiple trees beginning 86′ from DER, 10′ right of centerline, up to 87′ AGL/987′ MSL. Multiple trees beginning 1282′ from DER, 53′ left of centerline, up to 70′ AGL/970′ MSL.

ORSKY FOUR DEPARTURE

SL-5202 (FAA)

MINNEAPOLIS, MINNESOTA



TAKE-OFF MINIMUMS

Rwy 9: Standard with minimum climb of 340′ per NM to 3000.
Rwy 18: Standard with minimum climb of 371′ per NM to 3000.
Rwy 27: Standard with minimum climb of 259′ per NM to 2800.
Rwy 36: Standard with minimum climb of 259′ per NM to 2800.

ORSKY FOUR DEPARTURE

MINNEAPOLIS, MINNESOTA

(ORSKY4.ORSKY) 10098 MINNEAPOLIS/ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE)

NC-1, 21 OCT 2010 to 18 NOV 2010

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to MSP VOR/DME then via MSP R-208 to ORSKY INT/MSP 85 DME, thence via transition or assigned route. Expect clearance to filed altitude/flight level 10 minutes after departure.

FORT DODGE TRANSITION (ORSKY4.FOD): From over ORSKY INT via FOD R-356 to FOD VORTAC.

OMAHA TRANSITION (ORSKY4.OVR): From over ORSKY INT via MSP R-208 to ONTIJ INT then via OVR R-015 to OVR VORTAC.

TAKE-OFF OBSTACLE NOTES

RWY 9: Tank and multiple trees beginning 822′ from DER, 619′ right of centerline, up to 170′ AGL/1082′ MSL.
Trees 2248′ from DER, 966′ left of centerline, 100′ AGL/1009′ MSL.

RWY 18: Aircraft on taxiway 36′ from DER, 481′ right of centerline, up to 21′ AGL/928′ MSL.
Multiple trees beginning 406′ from DER, 287′ left of centerline, up to 49′ AGL/959′ MSL.
Tower 5016′ from DER, 201′ left of centerline, 120′ AGL/1078′ MSL.

RWY 27: Multiple trees beginning 7′ from DER, 235′ right of centerline, up to 83′ AGL/983′ MSL.
Multiple trees beginning 558′ from DER, 406′ left of centerline, up to 57′ AGL/957′ MSL.

RWY 36: Multiple trees beginning 86′ from DER, 10′ right of centerline, up to 87′ AGL/987′ MSL.
Multiple trees beginning 1282′ from DER, 53′ left of centerline, up to 70′ AGL/970′ MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	5000
CH 82312	089°	TDZE	910
W09A		Apt Elev	912

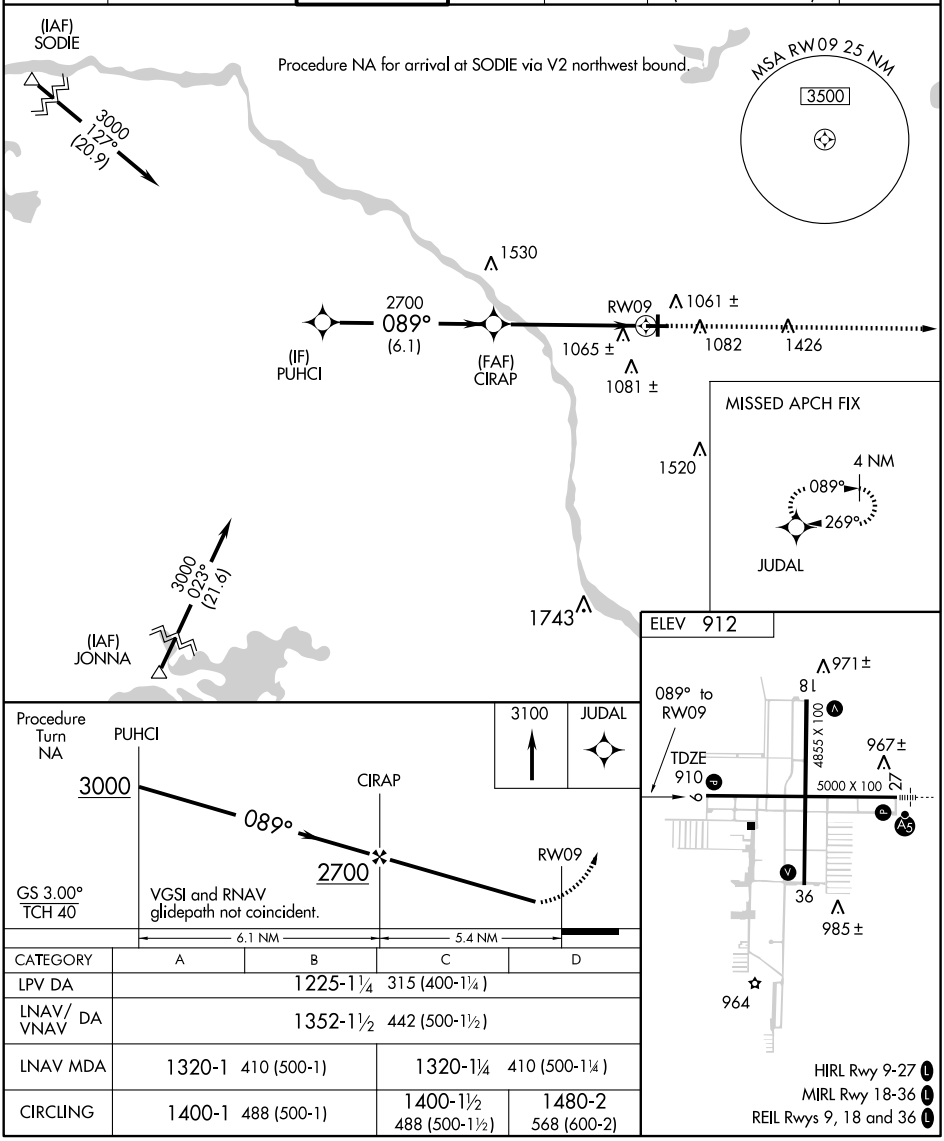
RNAV (GPS) RWY 9

MINNEAPOLIS/ ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE)

Baro-VNAV NA when using Crystal altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Crystal altimeter setting and increase all DA 25 feet, all MDA 40 feet, increase LNAV/VNAV all Cats visibility ¼ mile, LNAV Cat D ¼ mile.

MISSED APPROACH: Climb to 3100 direct JUDAL and hold.

ATIS	MINNEAPOLIS APP CON	ANOKA TOWER★	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
120.625	126.5	132.4 (CTAF) L	121.85	121.3	121.85 (When tower closed)	122.95



CATEGORY	A	B	C	D
LPV DA	1225-1¼ 315 (400-1¼)			
LNAV/ VNAV DA	1352-1½ 442 (500-1½)			
LNAV MDA	1320-1 410 (500-1)		1320-1¼ 410 (500-1¼)	
CIRCLING	1400-1 488 (500-1)		1400-1½ 488 (500-1½)	1480-2 568 (600-2)

HIRL Rwy 9-27 L
MIRL Rwy 18-36 L
REIL Rwys 9, 18 and 36 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	4855
179°	TDZE	912
	Apt Elev	912

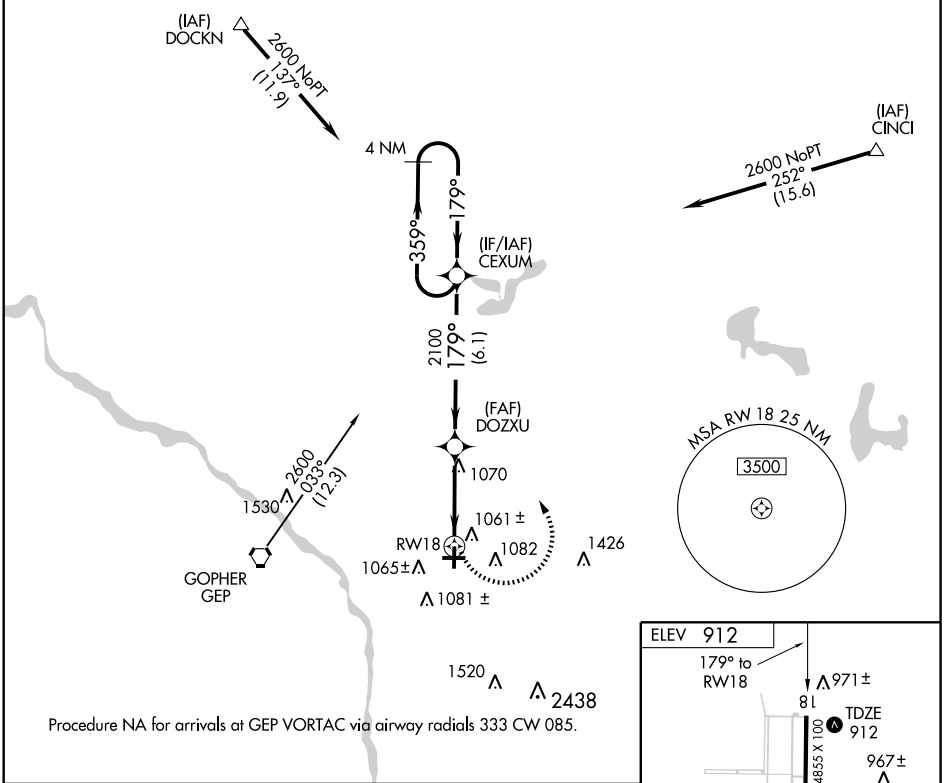
RNAV (GPS) RWY 18

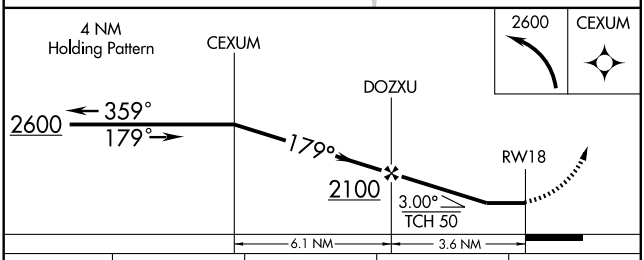
MINNEAPOLIS/
ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE)

▼ DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
▲ When local altimeter setting not received, use Crystal altimeter setting and increase all MDA 40 feet, increase LNAV Cat C visibility ¼ mile.

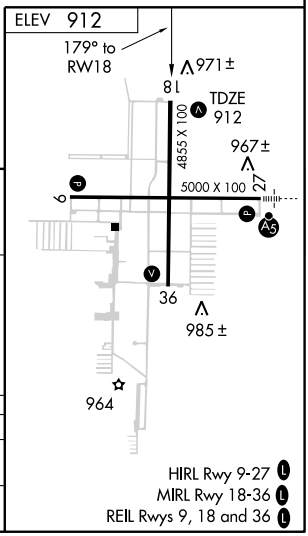
MISSED APPROACH: Climbing left turn to 2600 direct CEXUM and hold.

ATIS	MINNEAPOLIS APP CON	ANOKA TOWER★	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
120.625	126.5	132.4 (CTAF) L	121.85	121.3	121.85 (When tower closed)	122.95





CATEGORY	A	B	C	D
LNAV MDA	1380-1	468 (500-1)	1380-1¼ 468 (500-1¼)	1380-1½ 468 (500-1½)
CIRCLING	1400-1	488 (500-1)	1400-1½ 488 (500-1½)	1480-2 568 (600-2)



NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	5000
CH 78300	269°	TDZE	910
W27A		Apt Elev	912

RNAV (GPS) RWY 27

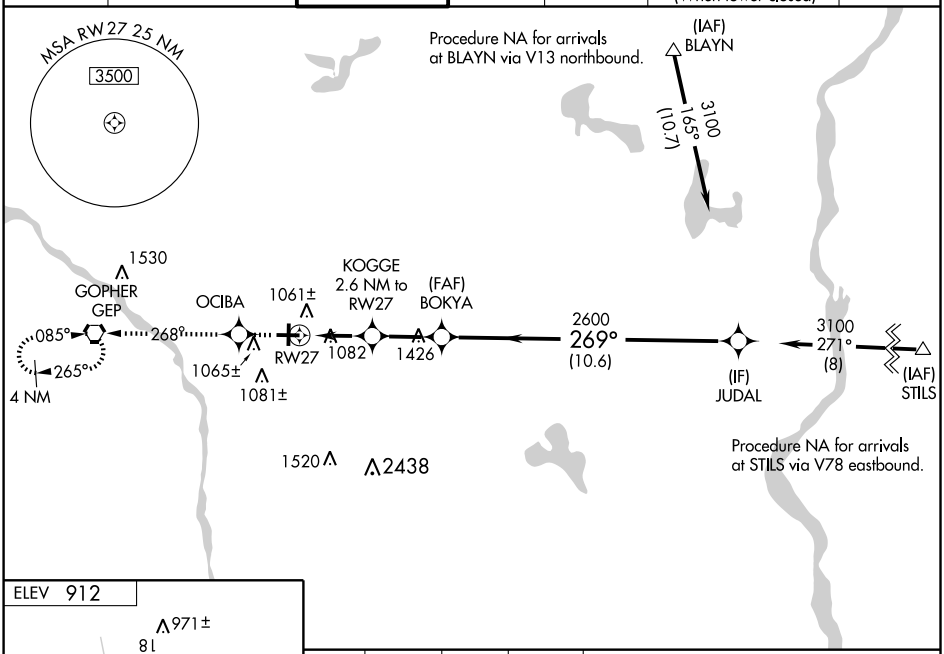
MINNEAPOLIS/ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE)

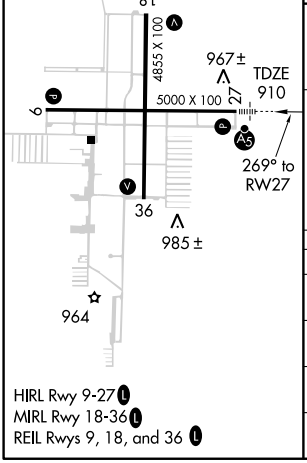
Baro-VNAV and VDP NA when using Crystal altimeter setting.
If local altimeter setting not received, use Crystal altimeter setting and increase all DAs/MDAs 40 feet.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
DME/DME RNP-0.3 NA.
For inoperative MALSR, increase LNAV Cat C visibility to 1¼.

MALSR

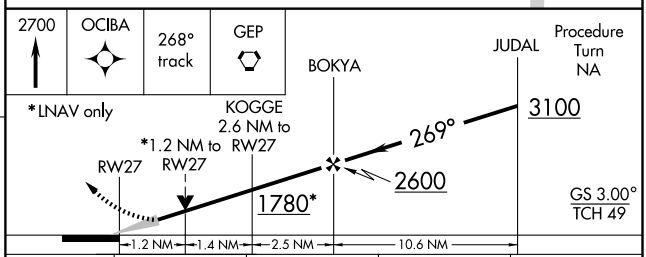
MISSED APPROACH: Climb to 2700 direct OCIBA and via 268° track to GEP VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	ANOKA TOWER★	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
120.625	126.5	132.4 (CTAF) L	121.85	121.3	121.85 (When tower closed)	122.95





HIRL Rwy 9-27 L
MIRL Rwy 18-36 L
REIL Rwys 9, 18, and 36 L



CATEGORY	A	B	C	D
LPV DA	1160-½ 250 (300-½)			
LNAV/VNAV DA	1371-1 461 (500-1)			
LNAV MDA	1340-½ 430 (500-½)			1340-1 430 (500-1)
CIRCLING	1400-1 488 (500-1)		1400-1½ 488 (500-1½)	1480-2 568 (600-2)

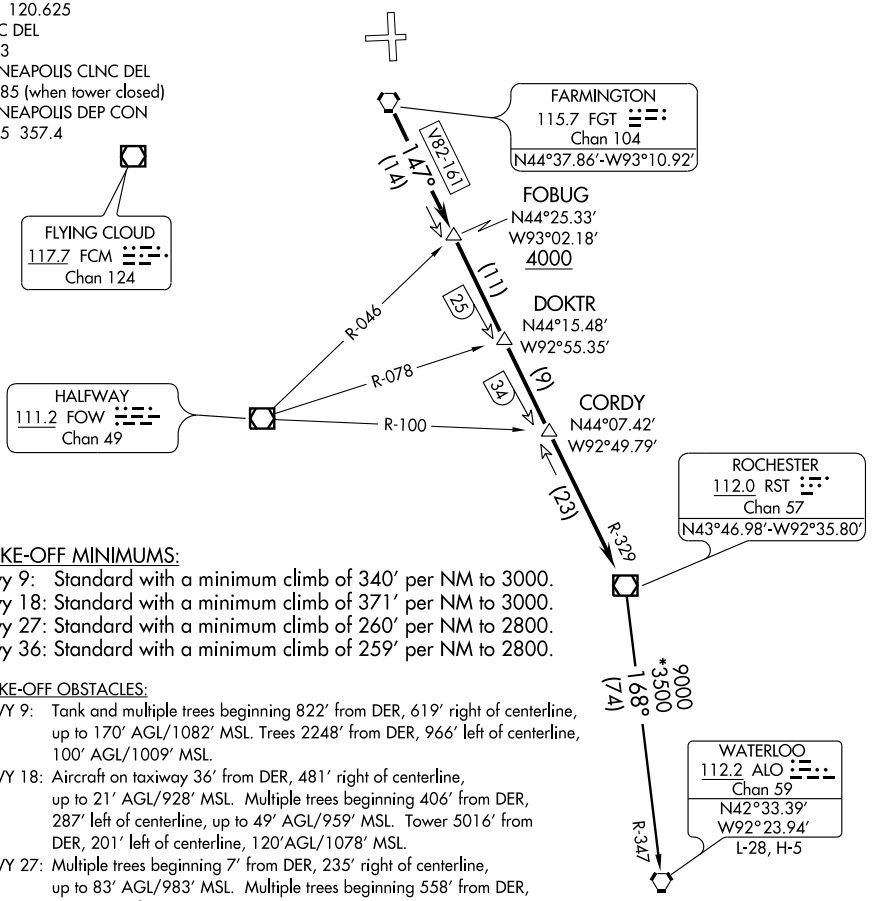
NC-1, 21 OCT 2010 to 18 NOV 2010

ROCHESTER FOUR DEPARTURE

SL-5202 (FAA) MINNEAPOLIS, MINNESOTA

NC-1, 21 OCT 2010 to 18 NOV 2010

ATIS 120.625
CLNC DEL
121.3
MINNEAPOLIS CLNC DEL
121.85 (when tower closed)
MINNEAPOLIS DEP CON
126.5 357.4



TAKE-OFF MINIMUMS:
Rwy 9: Standard with a minimum climb of 340′ per NM to 3000.
Rwy 18: Standard with a minimum climb of 371′ per NM to 3000.
Rwy 27: Standard with a minimum climb of 260′ per NM to 2800.
Rwy 36: Standard with a minimum climb of 259′ per NM to 2800.

TAKE-OFF OBSTACLES:
RWY 9: Tank and multiple trees beginning 822′ from DER, 619′ right of centerline, up to 170′ AGL/1082′ MSL. Trees 2248′ from DER, 966′ left of centerline, 100′ AGL/1009′ MSL.
RWY 18: Aircraft on taxiway 36′ from DER, 481′ right of centerline, up to 21′ AGL/928′ MSL. Multiple trees beginning 406′ from DER, 287′ left of centerline, up to 49′ AGL/959′ MSL. Tower 5016′ from DER, 201′ left of centerline, 120′AGL/1078′ MSL.
RWY 27: Multiple trees beginning 7′ from DER, 235′ right of centerline, up to 83′ AGL/983′ MSL. Multiple trees beginning 558′ from DER, 406′ right of centerline, up to 57′ AGL/957′ MSL.
RWY 36: Multiple trees beginning 86′ from DER, 10′ right of centerline, up to 87′ AGL/987′ MSL. Multiple trees beginning 1282′ from DER, 53′ left of centerline, up to 70′ AGL/970′ MSL.

NOTE: RADAR required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS:
Fly assigned heading and altitude for radar vectors to FGT VORTAC then via FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/FGT 14 DME at or above 4000, Thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

WATERLOO TRANSITION (RST4.ALO): From over RST VOR/DME via RST R-168 and ALO R-347 to ALO VORTAC.

SCHEP THREE DEPARTURE

(SCHEP3.SCHEP) 10154 MINNEAPOLIS/ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE) MINNEAPOLIS, MINNESOTA

SCHEP THREE DEPARTURE

(SCHEP3.SCHEP) 10154 MINNEAPOLIS/ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE) MINNEAPOLIS, MINNESOTA

SL-5202 (FAA)

TAKE-OFF OBSTACLES:

RWY 9: Tank and multiple trees beginning 822′ from DER, 619′ right of centerline, up to 170′ AGL/1082′ MSL. Trees 2248′ from DER, 966′ left of centerline, 100′ AGL/1009′ MSL.

RWY 18: Aircraft on taxiway 36′ from DER, 481′ right of centerline, up to 21′ AGL/928′ MSL. Multiple trees beginning 406′ from DER, 287′ left of centerline, up to 49′ AGL/959′ MSL Tower 5016′ from DER 201′ left of centerline, 120′ AGL/1078′ MSL..

RWY 27: Multiple trees beginning 7′ from DER, 235′ right of centerline, up to 83′ AGL/983′ MSL. Multiple trees beginning 558′ from DER, 406′ right of centerline, up to 57′ AGL/957′ MSL.

RWY 36: Multiple trees beginning 86′ from DER, 10′ right of centerline, up to 87′ AGL/987′ MSL. Multiple trees beginning 1282′ from DER, 53′ left of centerline, up to 70′ AGL/970′ MSL.

TAKE-OFF MINIMUMS:

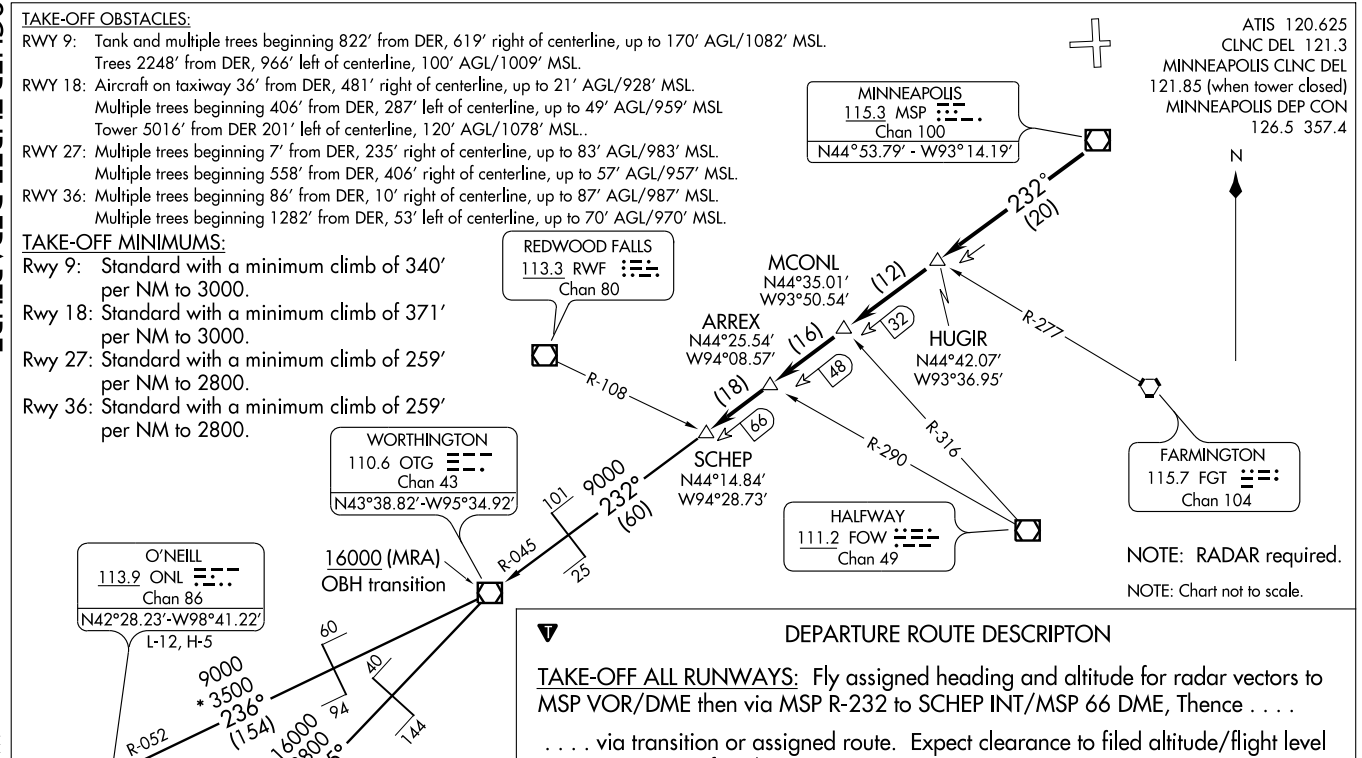
Rwy 9: Standard with a minimum climb of 340′ per NM to 3000.

Rwy 18: Standard with a minimum climb of 371′ per NM to 3000.

Rwy 27: Standard with a minimum climb of 259′ per NM to 2800.

Rwy 36: Standard with a minimum climb of 259′ per NM to 2800.

ATIS 120.625
CLNC DEL 121.3
MINNEAPOLIS CLNC DEL
121.85 (when tower closed)
MINNEAPOLIS DEP CON
126.5 357.4



DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to MSP VOR/DME then via MSP R-232 to SCHEP INT/MSP 66 DME, Thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

O'NEILL TRANSITION (SCHEP3.ONL): From over SCHEP INT via OTG R-045 to OTG VOR/DME, then via OTG R-236 and ONL R-052 to ONL VORTAC.

WOLBACH TRANSITION (SCHEP3.OBH): From over SCHEP INT via OTG R-045 to OTG VOR/DME then via OTG R-215 and OBH R-034 to OBH VORTAC.

TWOLF TWO ARRIVAL

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA

NC-1, 21 OCT 2010 to 18 NOV 2010

MINNEAPOLIS APP CON
126.95 335.5
118.72 (MSP RWY 35)
MINNEAPOLIS ATIS
135.35 239.275
ANOKA COUNTY ATIS 120.625
CRYSTAL ATIS 124.475
FLYING CLOUD ATIS 124.9
ST. PAUL DOWNTOWN ATIS
118.35

L.O. SIMENSTAD MUNI

ANOKA COUNTY-BLAINE AIRPORT
(JANES FIELD)

NEW RICHMOND RGNL

GOPHER
117.3 GEP
Chan 120

CRYSTAL

ST. PAUL DOWNTOWN HOLMAN FIELD

FLYING CLOUD

300°

MINNEAPOLIS-ST. PAUL INTL/
WOLD CHAMBERLAIN

FLYING CLOUD
117.7 FCM
Chan 124
N44°49.54′-W93°27.41′

R-180

R-178

R-103

SLIKK
N44°47.90′
W93°17.21′

330°
(11)

AIRLAKE

FARMINGTON
115.7 FGT
Chan 104
N44°37.86′-W93°10.92′

TRGET
N44°13.88′-W93°27.73′

VERTICAL NAVIGATION
PLANNING INFORMATION

MSP: Expect clearance to cross at 11000.
All other airports:
Turbojets: Expect clearance to cross at 8000.
Turboprops: Expect clearance to cross at 7000.

5000
(36)
360°

(8)

R-201

GDNEE
N44°30.68′
W93°15.98′

17

(9)

55

PIKKL
N44°22.82′
W93°21.49′

021°
5000
(10)

R-081

6000

62

(7)

MANKATO
110.8 MKT
Chan 45

LYNKS
N44°06.89′
W93°28.39′

8000
(22)

84

KGEEE
N43°44.94′
W93°30.47′

12000
358°
(28)

112

TWOLF
N43°17.00′
W93°33.09′

FORT DODGE
113.5 FOD
Chan 82
N42°36.67′-W94°17.69′
L-12, H-5

12000
032°
(30)

52

R-178
GEP

NOTE: DME and RADAR Required.

12000
*2900
032°
(22)

TICKT
N42°53.71′
W93°59.01′

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

TWOLF TWO ARRIVAL

MINNEAPOLIS, MINNESOTA

(TWOLF.TWOLF2) 10154

ARRIVAL DESCRIPTION

FORT DODGE TRANSITION (FOD.TWOLF2): From over FOD VORTAC via FOD R-032 to TWOLF/FOD 52 DME, Thence . . . .

....From over TWOLF/GEP 112 DME via GEP R-178 to KGEEE/GEP 84 DME, then as depicted to TRGET INT/GEP 55 DME. Thence....

LANDING MSP RWYS 12L/R: From over TRGET INT via FGT R-201 to FGT VORTAC, then via FGT R-330 to SLIKK INT/FGT 11 DME, then via heading 300° for radar vectors to final approach course.

LANDING MSP RWYS 30L/R, 4, 22, 17, 35: From over TRGET INT via FGT R-201 to FGT VORTAC, then via radar vectors to final approach course.

LANDING ALL OTHER AIRPORTS: From over TRGET INT via FCM R-180 to FCM VOR/DME, then expect radar vectors to final approach course.

NC-1, 21 OCT 2010 to 18 NOV 2010

VORTAC GEP 117.3 Chan 120	APP CRS 264°	Rwy Idg 5000 TDZE 910 Apt Elev 912

VOR/DME RWY 27

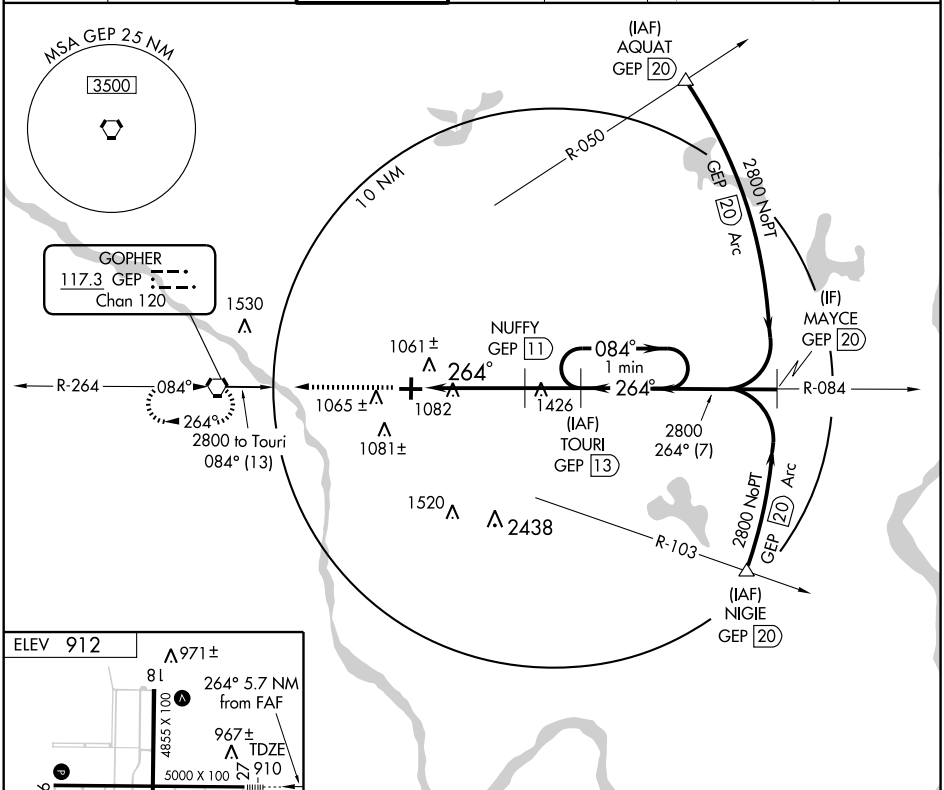
MINNEAPOLIS/ ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE)

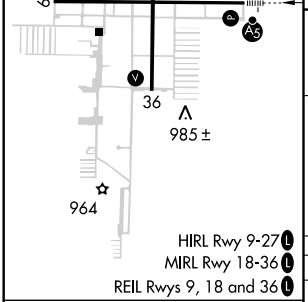
DME required.
When local altimeter setting not received, use Crystal altimeter setting and increase all MDA 40 feet.
VDP NA when using Crystal altimeter setting.

MALSR

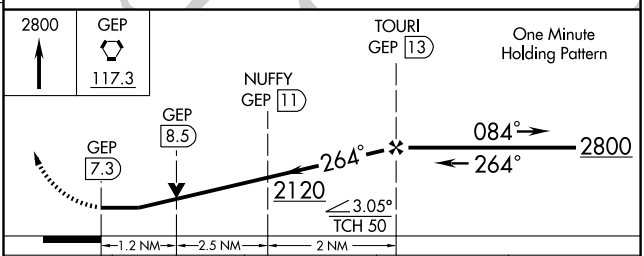
MISSED APPROACH: Climb to 2800 direct GEP VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	ANOKA TOWER★	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
120.625	126.5	132.4 (CTAF) L	121.85	121.3	121.85 (When tower closed)	122.95





FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54



CATEGORY	A	B	C	D
S-27	1340-½	430 (500-½)	1340-¾ 430 (500-¾)	1340-1 430 (500-1)
CIRCLING	1400-1	488 (500-1)	1400-1½ 488 (500-1½)	1480-2 568 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010

VORTAC GEP	APP CRS	Rwy Idg	5000
117.3	084°	TDZE	910
Chan 120		Apt Elev	912

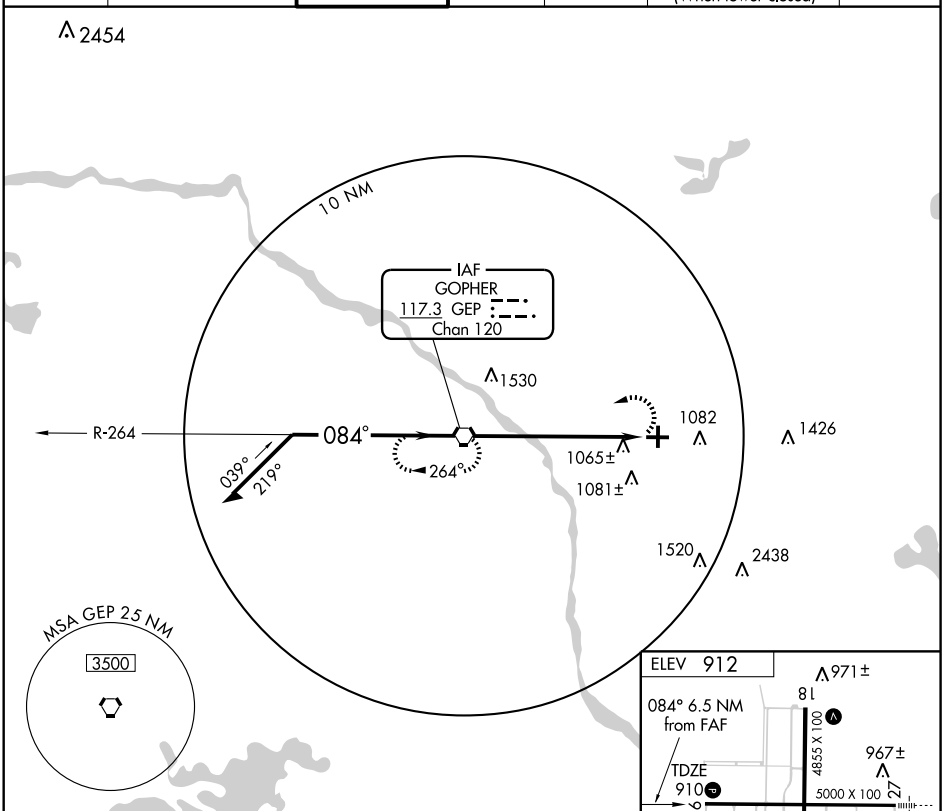
VOR RWY 9

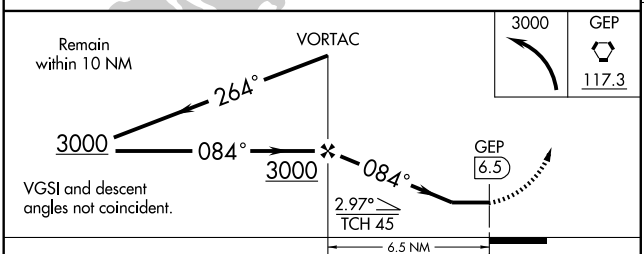
MINNEAPOLIS/ ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE)

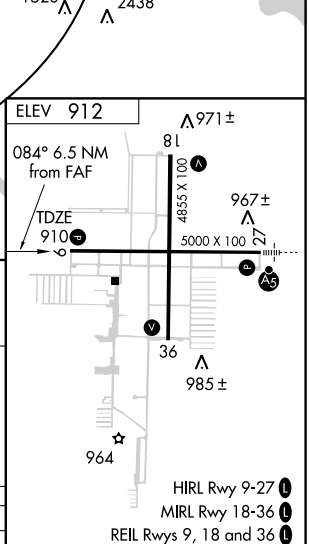
▼ Visibility reduction by helicopters NA.
▲ When local altimeter setting not received, use Crystal altimeter setting and increase all MDA 40 feet and S-9 Cat C visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 3000 direct to GEP VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	ANOKA TOWER★	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
120.625	126.5	132.4 (CTAF) L	121.85	121.3	121.85 (When tower closed)	122.95







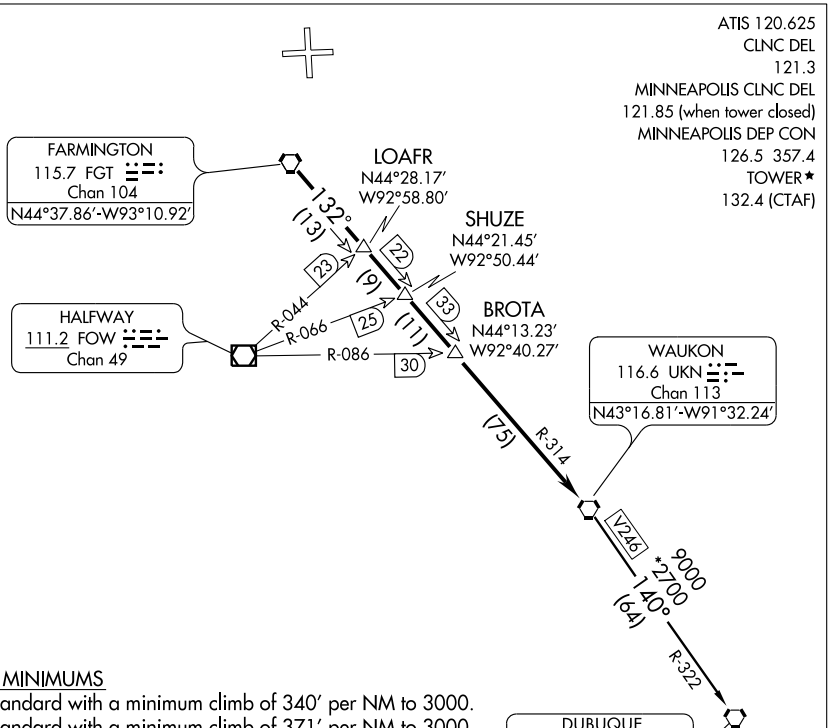
CATEGORY	A	B	C	D
S-9	1380-1	470 (500-1)	1380-1¼ 470 (500-1¼)	1380-1½ 470 (500-1½)
CIRCLING	1400-1	488 (500-1)	1400-1½ 488 (500-1½)	1480-2 568 (600-2)

FAF to MAP 6.5 NM					
Knots	60	90	120	150	180
Min:Sec	6:30	4:20	3:15	2:36	2:10

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAUKON THREE DEPARTURE SL-5202 (FAA)

NC-1, 21 OCT 2010 to 18 NOV 2010



TAKE-OFF MINIMUMS

Rwy 9: Standard with a minimum climb of 340′ per NM to 3000.
Rwy 18: Standard with a minimum climb of 371′ per NM to 3000.
Rwy 27: Standard with a minimum climb of 260′ per NM to 2800.
Rwy 36: Standard with a minimum climb of 259′ per NM to 2800.

TAKE-OFF OBSTACLE NOTES

RWY 9: Tank and multiple trees beginning 822′ from DER, 619′ right of centerline, up to 170′ AGL/1082′ MSL. Trees 2248′ from DER, 966′ left of centerline, 100′ AGL/1009′ MSL.
RWY 18: Aircraft on taxiway 36′ from DER, 481′ right of centerline, up to 21′ AGL/928′ MSL. Multiple trees beginning 406′ from DER, 287′ left of centerline, up to 49′ AGL/959′ MSL. Tower 5016′ from DER, 201′ left of centerline, 120′ AGL/1078′ MSL.
RWY 27: Multiple trees beginning 7′ from DER, 235′ right of centerline, up to 83′ AGL/983′ MSL. Multiple trees beginning 558′ from DER, 406′ left of centerline, up to 57′ AGL/957′ MSL.
RWY 36: Multiple trees beginning 86′ from DER, 10′ right of centerline, up to 87′ AGL/987′ MSL. Multiple trees beginning 1282′ from DER, 53′ left of centerline, up to 70′ AGL/970′ MSL.

NOTE: RADAR required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to FGT VORTAC then via FGT R-132 and UKN R-314 to UKN VORTAC, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

DUBUQUE TRANSITION (UKN3.DBQ): From over UKN VORTAC via UKN R-140 and DBQ R-322 to DBQ VORTAC.

WLSTN THREE DEPARTURE

(WLSTN3.WLSTN) 10042

MINNEAPOLIS/ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE)

MINNEAPOLIS, MINNESOTA

WLSTN THREE DEPARTURE

(WLSTN3.WLSTN) 10042

MINNEAPOLIS/ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE)

MINNEAPOLIS, MINNESOTA

SL-5202 (FAA)

ATIS 120.625
CLNC DEL
121.3
MINNEAPOLIS CLNC DEL
121.85 (when tower closed)
MINNEAPOLIS DEP CON
126.5 357.4

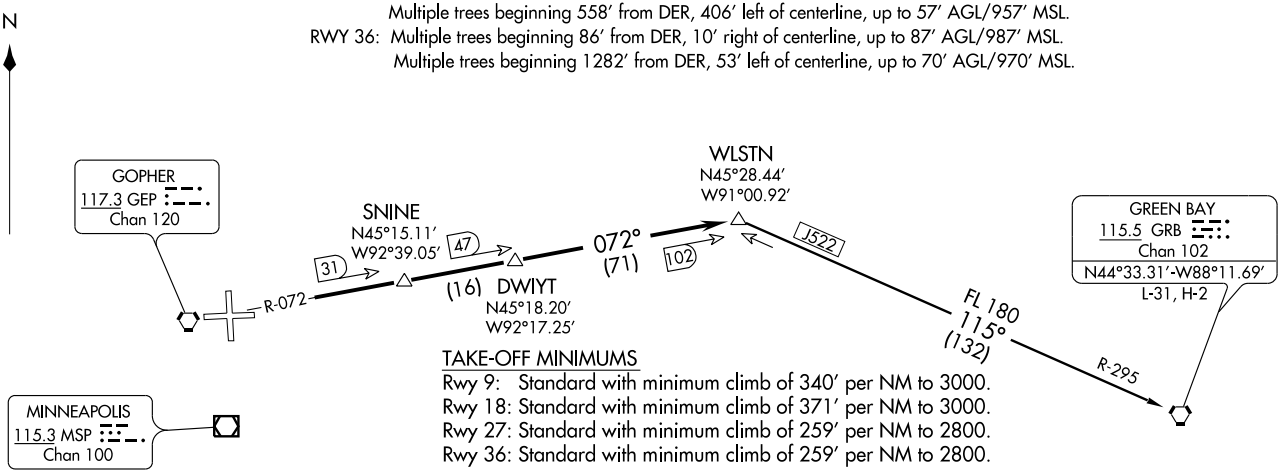
TAKE-OFF OBSTACLE NOTES

RWY 9: Tank and multiple trees beginning 822′ from DER, 619′ right of centerline, up to 170′ AGL/1082′ MSL. Trees 2248′ from DER, 966′ left of centerline, 100′ AGL/1009′ MSL.

RWY 18: Aircraft on taxiway 36′ from DER, 481′ right of centerline, up to 21′ AGL/928′ MSL. Multiple trees beginning 406′ from DER, 287′ left of centerline, up to 49′ AGL/959′ MSL. Tower 5016′ from DER, 201′ left of centerline, 120′ AGL/1078′ MSL.

RWY 27: Multiple trees beginning 7′ from DER, 235′ right of centerline, up to 83′ AGL/983′ MSL. Multiple trees beginning 558′ from DER, 406′ left of centerline, up to 57′ AGL/957′ MSL.

RWY 36: Multiple trees beginning 86′ from DER, 10′ right of centerline, up to 87′ AGL/987′ MSL. Multiple trees beginning 1282′ from DER, 53′ left of centerline, up to 70′ AGL/970′ MSL.



TAKE-OFF MINIMUMS

Rwy 9: Standard with minimum climb of 340′ per NM to 3000.
Rwy 18: Standard with minimum climb of 371′ per NM to 3000.
Rwy 27: Standard with minimum climb of 259′ per NM to 2800.
Rwy 36: Standard with minimum climb of 259′ per NM to 2800.

NOTE: RADAR and DME required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to GEP R-072 to WLSTN/GEP 102 DME, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

GREEN BAY TRANSITION (WLSTN3.GRB): From over WLSTN via GRB R-295 to GRB VORTAC.

ZMBRO THREE DEPARTURE

(ZMBRO3.ZMBRO) 10042 MINNEAPOLIS/ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE) MINNEAPOLIS, MINNESOTA

ZMBRO THREE DEPARTURE
(ZMBRO3.ZMBRO) 10042 MINNEAPOLIS/ANOKA COUNTY-BLAINE AIRPORT (JANES FIELD) (ANE) MINNEAPOLIS, MINNESOTA

SL-5202 (FAA)

ATIS 120.625
CLNC DEL
121.3
MINNEAPOLIS CLNC DEL
121.85 (when tower closed)
MINNEAPOLIS DEP CON
126.5 357.4

MINNEAPOLIS
115.3 MSP
Chan 100

TAKE-OFF OBSTACLES:

RWY 9: Tank and multiple trees beginning 822′ from DER, 619′ right of centerline, up to 170′ AGL/1082′ MSL. Trees 2248′ from DER, 966′ left of centerline, 100′ AGL/1009′ MSL.

RWY 18: Aircraft on taxiway 36′ from DER, 481′ right of centerline, up to 21′ AGL/928′ MSL. Multiple trees beginning 406′ from DER, 287′ left of centerline, up to 49′ AGL/959′ MSL. Tower 5016′ from DER, 201′ left of centerline, 120′ AGL/1078′ MSL.

RWY 27: Multiple trees beginning 7′ from DER, 235′ right of centerline, up to 83′ AGL/983′ MSL. Multiple trees beginning 558′ from DER, 406′ right of centerline, up to 57′ AGL/957′ MSL.

RWY 36: Multiple trees beginning 86′ from DER, 10′ right of centerline, up to 87′ AGL/987′ MSL. Multiple trees beginning 1282′ from DER, 53′ left of centerline, up to 70′ AGL/970′ MSL.

TAKE-OFF MINIMUMS:

Rwy 9: Standard with a minimum climb of 340′ per NM to 3000.

Rwy 18: Standard with a minimum climb of 371′ per NM to 3000.

Rwy 27: Standard with a minimum climb of 259′ per NM to 2800.

Rwy 36: Standard with a minimum climb of 259′ per NM to 2800.

R-138

138°

34

JEDET
N44°27.68′
W92°43.68′
4000

121°
(14)

ZMBRO
N44°20.50′
W92°26.91′

R-059

HALFWAY
111.2 FOW
Chan 49

R-006

9000
*2800
121°
(50)

NODINE
117.9 ODI
Chan 126
N43°54.74′-W91°28.05′
L-28, H-2

ROCHESTER
112.0 RST
Chan 57

R-301

N

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to MSP VOR/DME then via MSP R-138 to JEDET INT/MSP 34 DME, at or above 4000; then via ODI R-301 to ZMBRO INT/ODI 50 DME, Thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

NODINE TRANSITION (ZMBRO3.ODI): From over ZMBRO INT via ODI R-301 to ODI VORTAC.

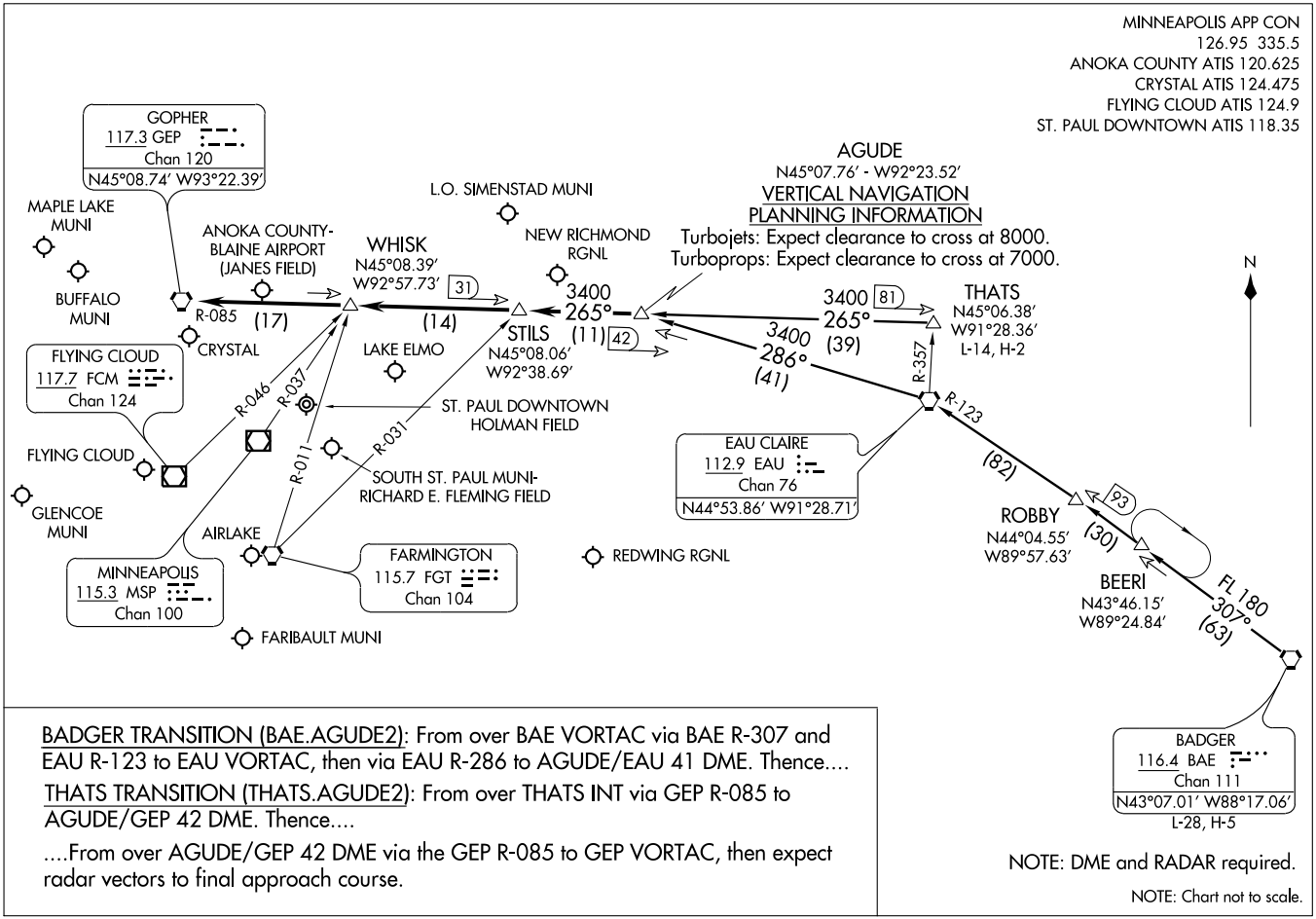
NOTE: RADAR Required

NOTE: Chart not to scale.

AGUDE TWO ARRIVAL

(AGUDE.AGUDE2) 10154

MINNEAPOLIS-ST. PAUL, MINNESOTA



BADGER TRANSITION (BAE.AGUDE2): From over BAE VORTAC via BAE R-307 and EAU R-123 to EAU VORTAC, then via EAU R-286 to AGUDE/EAU 41 DME. Thence....

THATS TRANSITION (THATS.AGUDE2): From over THATS INT via GEP R-085 to AGUDE/GEP 42 DME. Thence....

....From over AGUDE/GEP 42 DME via the GEP R-085 to GEP VORTAC, then expect radar vectors to final approach course.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

(AGUDE.AGUDE2) 10154

AGUDE TWO ARRIVAL

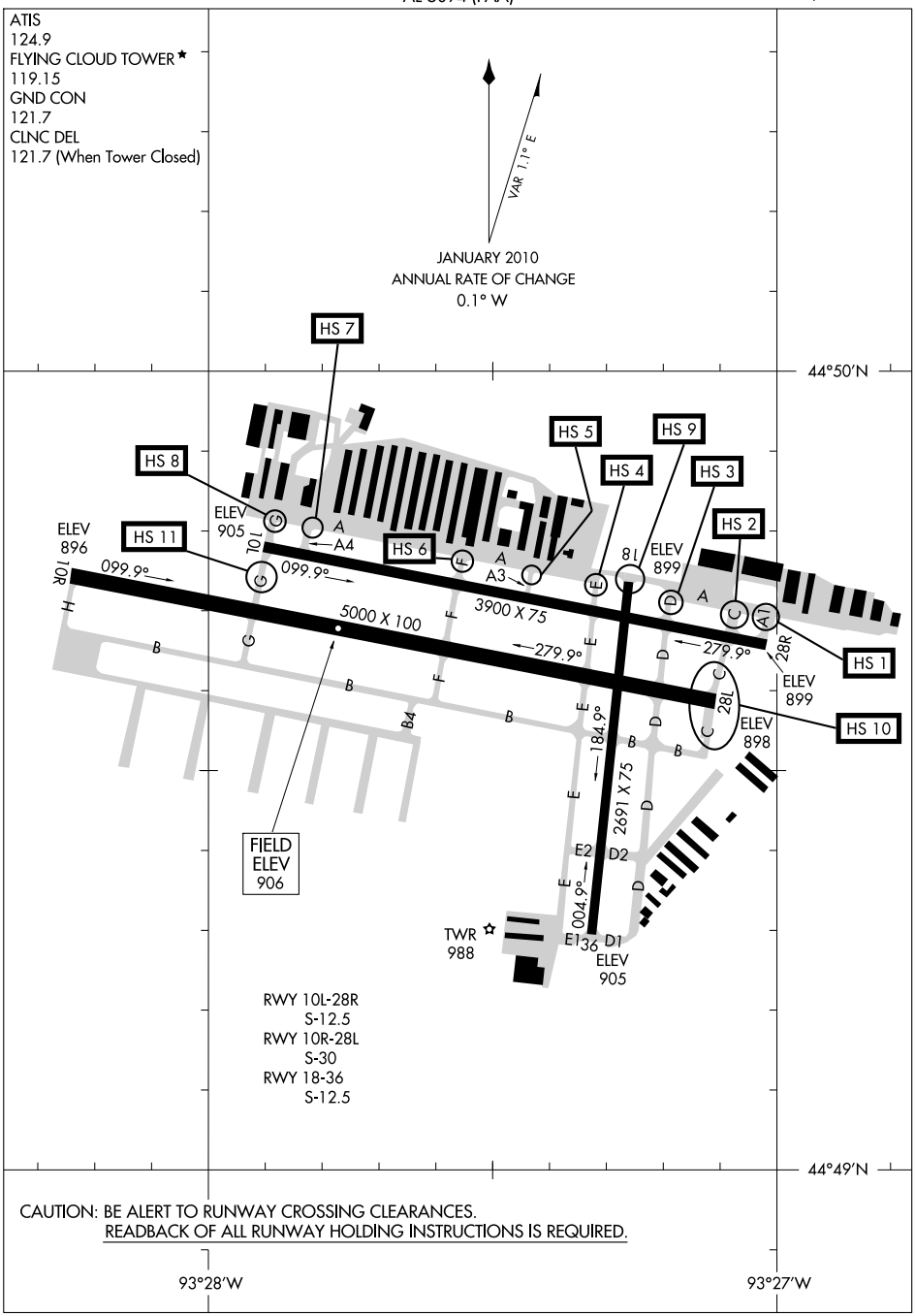
ST-263 (FAA)

MINNEAPOLIS-ST. PAUL, MINNESOTA

AIRPORT DIAGRAM

AL-5094 (FAA)

MINNEAPOLIS/ FLYING CLOUD (FCM)
MINNEAPOLIS, MINNESOTA



NC-1, 21 OCT 2010 to 18 NOV 2010

AIRPORT DIAGRAM

MINNEAPOLIS, MINNESOTA
MINNEAPOLIS/ FLYING CLOUD (FCM)

10266

FLYING CLOUD (FCM) 11 SW UTC−6(−5DT) N44°49.65′ W93°27.51′ **TWIN CITIES**

906 B S4 **FUEL** 100, 100LL, JET A OX 3, 4 TPA–1906(1000) NOTAM FILE FCM **H–2J, L–12J, 14H, A**

RWY 10R–28L: H5000X100 (ASPH) S–30 HIRL **IAP, AD**

RWY 10R: MALSR. PAPI(P4L)—GA 3.0° TCH 42′. Rgt tfc.

RWY 28L: REIL. PAPI(P4L)—GA 3.0° TCH 44′. Bldg.

RWY 10L–28R: H3900X75 (ASPH) S–12.5 MIRL

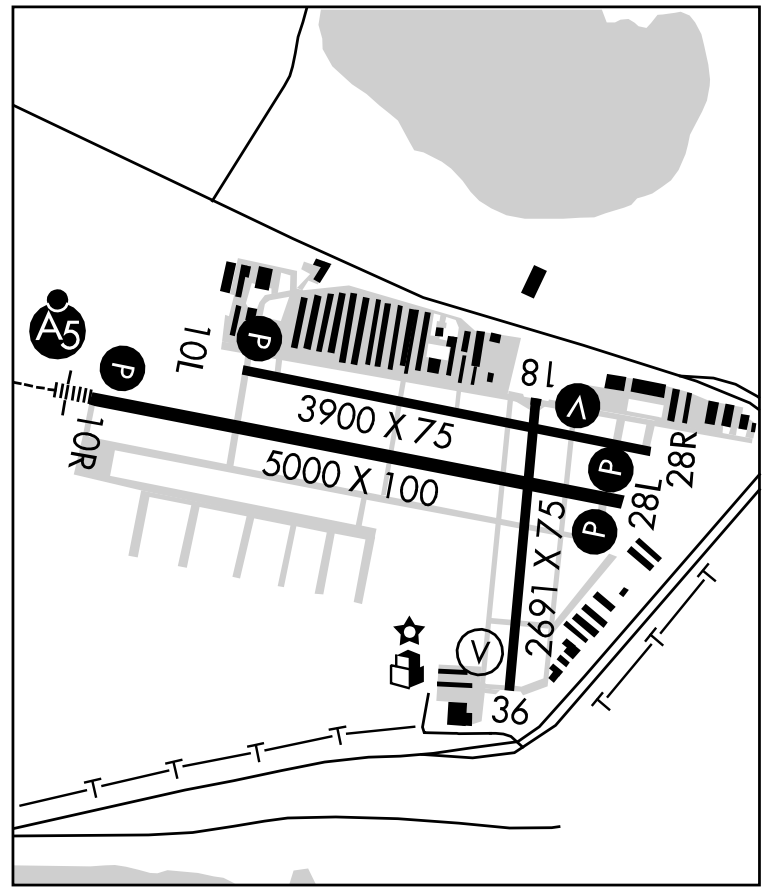
RWY 10L: PAPI(P4L)—GA 3.0°, TCH 39′.

RWY 28R: PAPI(P4L)—GA 3.0° TCH 38′. Road. Rgt tfc.

RWY 18–36: H2691X75 (ASPH) S–12.5 MIRL

RWY 18: REIL. VASI(V4L)—GA 3.0° TCH 37′. Tree.

RWY 36: REIL. VASI(V4L)—GA 3.0° TCH 31′. Road.



AIRPORT REMARKS: Attended 1300–0400Z‡. Self serve fuel available 24 hrs. Rwy 10L–28R CLOSED when twr clsd. Arpt CLOSED to jets not meeting FAR 36, jet training and acft weighting more than 60,000 lbs gross weight. Maintenance run-ups are prohibited between 0400–1300Z‡. Ultralight ops prohibited. Deer and waterfowl on and invof arpt. When twr clsd snow removal operators monitor 119.15. Rwy 10R and Rwy 28R rgt tfc during twr hrs only. For noise abatement procedures call 612–725–6327. Rwy 18–36 turn–off A, B, D1, D2, E1, E2, lights OTS indef. When twr clsd ACTIVATE MIRL Rwy 18–36 and HIRL Rwy 10R–28L, MALSR Rwy 10R, REIL Rwy 28L, Rwy 18 and Rwy 36, VASI Rwy 18, PAPI Rwy 10L, Rwy 10R, Rwy 28L and Rwy 28R–frequency 119.15. PAPI Rwy 10L, Rwy 28R, and MIRL Rwy 10L–28R activated only when Rwy 10R–28L clsd. Rwy 36 VASI on continuously.

WEATHER DATA SOURCES: ASOS (952) 941–4156.

COMMUNICATIONS: CTAF 119.15 **ATIS** 124.9

UNICOM 122.95

Ⓡ **MINNEAPOLIS APP/DEP CON** 134.7

MINNEAPOLIS CLNC DEL 121.7 (When twr closed)

TOWER 119.15 125.2 (Apr–Oct 1300–0400Z‡, Nov–Mar 1300–0300Z‡) **GND CON** 121.7 **CLNC DEL** 121.7

AIRSPACE: CLASS D svc Apr–Oct 1300–0400Z‡ Nov–Mar 1300–0300Z‡ other times CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE FCM.

(L) VOR/DME 117.7 FCM Chan 124 N44°49.52′ W93°26.56′ at fld. 902/1E.

ILS 109.7 I–FCM RWY 10R. GS unusable byd 5 degrees right of course. GS unmonitored 0300–1200Z‡.

COPTER ILS 109.7 I–FCM Rwy 10R.

COPTER ILS or LOC RWY 10R

MINNEAPOLIS/ FLYING CLOUD (FCM)

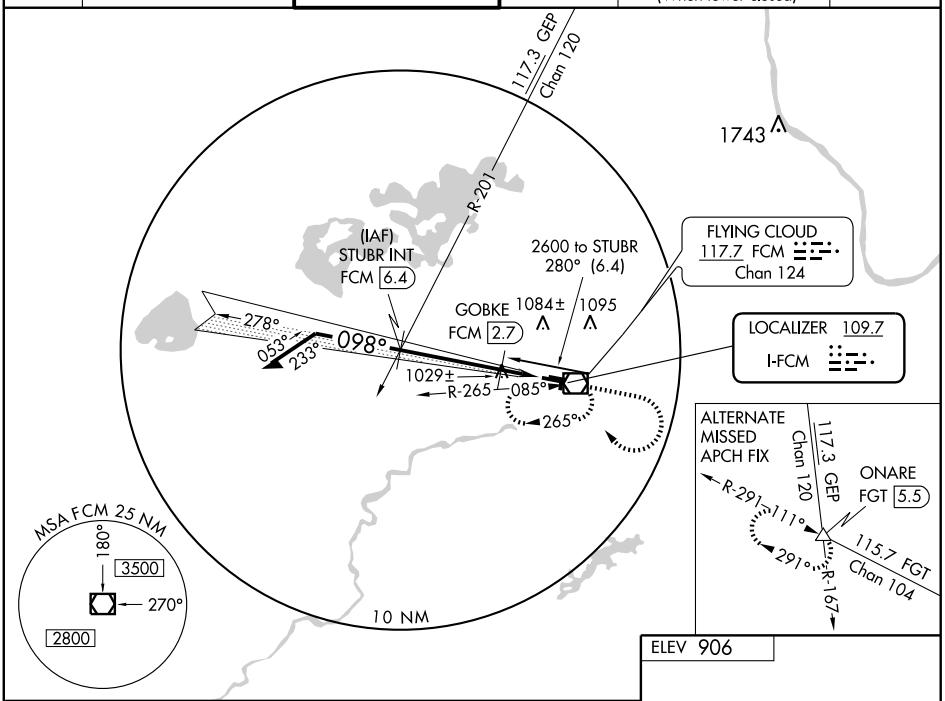
LOC I-FCM	APP CRS	Rwy Idg / TDZE / Apt Elev
109.7	098°	5000 / 905 / 906

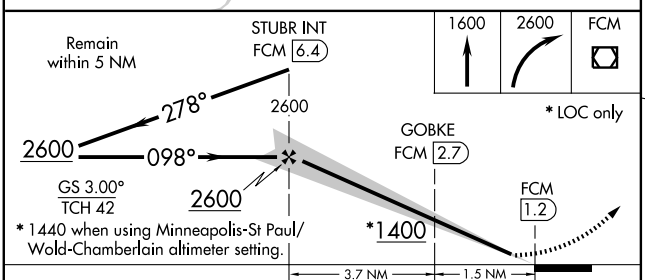
For inoperative MALSR increase visibility to ½ mile. When local altimeter setting not received, use Minneapolis-St Paul Intl-Wold Chamberlain altimeter setting and increase DA 34 feet and all MDA 40 feet.

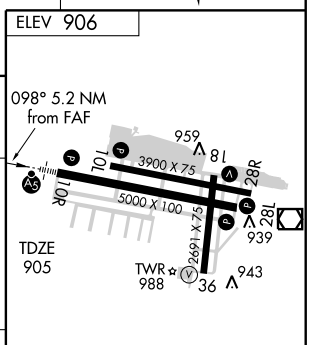
MALSR

MISSED APPROACH: Climb to 1600 then climbing right turn to 2600 direct FCM VOR/DME and hold, continue climb-in-hold to 2600.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	MINNEAPOLIS CLNC DEL	UNICOM
124.9	134.7 357.4	119.15 (CTAF) L	121.7	121.7 (When tower closed)	122.95







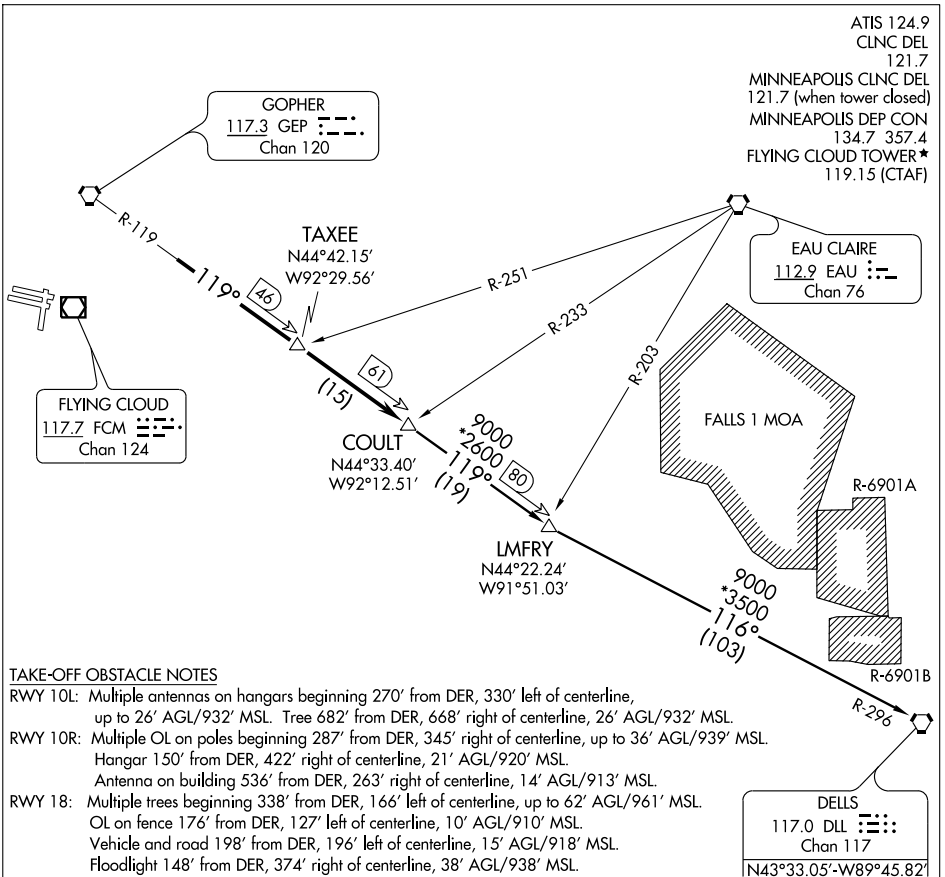
CATEGORY	COPTER	B	C	D
H-ILS 10R	1105- ¼ 200 (200- ¼)	NA		
H-LOC 10R	1400-¼ 495 (500-¼)	NA		
GOBKE FIX MINIMUMS				
H-LOC 10R	1280-¼ 375 (400-¼)	NA		

HIRL Rwy 10R-28L L
MIRL Rwys 10L-28R and 18-36 L
REIL Rwys 18, 28L, and 36 L

FAF to MAP 5.2 NM

Knots	45	60	75	90	105
Min:Sec	6:56	5:12	4:10	3:28	2:58

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010



TAKE-OFF OBSTACLE NOTES

RWY 10L: Multiple antennas on hangars beginning 270' from DER, 330' left of centerline, up to 26' AGL/932' MSL. Tree 682' from DER, 668' right of centerline, 26' AGL/932' MSL.

RWY 10R: Multiple OL on poles beginning 287' from DER, 345' right of centerline, up to 36' AGL/939' MSL. Hangar 150' from DER, 422' right of centerline, 21' AGL/920' MSL. Antenna on building 536' from DER, 263' right of centerline, 14' AGL/913' MSL.

RWY 18: Multiple trees beginning 338' from DER, 166' left of centerline, up to 62' AGL/961' MSL. OL on fence 176' from DER, 127' left of centerline, 10' AGL/910' MSL. Vehicle and road 198' from DER, 196' left of centerline, 15' AGL/918' MSL. Floodlight 148' from DER, 374' right of centerline, 38' AGL/938' MSL. OL on hangar 282' from DER, 317' right of centerline, 37' AGL/937' MSL.

RWY 28R: Hangar 259' from DER. 355' right of centerline, 18' AGL/931' MSL.

RWY 36: Wind vane 923' from DER, 404' left of centerline, 61' AGL/960' MSL. Vent on building 943' from DER, 295' left of centerline, 44' AGL/943' MSL. Pole 714' from DER, 351' left of centerline, 33' AGL/932' MSL. Multiple trees beginning 504' from DER, 324' right of centerline, up to 67' AGL/966' MSL.

TAKE-OFF MINIMUMS

Rwy 10L, 28R, 10R, 28L, 18, 36: Standard.

NOTE: RADAR required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to intercept GEP R-119 to COULT INT/GEP 61 DME, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

DELLS TRANSITION (COULT3.DLL): From over COULT INT via GEP R-119 to LMFRY, then via DLL R-296 to DLL VORTAC.

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

DARWIN THREE DEPARTURE
(DWN3.DWN) 10042
MINNEAPOLIS, MINNESOTA
MINNEAPOLIS/ FLYING CLOUD (FCM)
NC-1, 21 OCT 2010 to 18 NOV 2010

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to MSP VOR/DME then via MSP R-281 and DWN R-095 to DWN VORTAC, thence . . . .

. . . . via transition or assigned route. Expectclearance to filed altitude/flight level 10 (ten) minutes after departure.

ABERDEEN TRANSITION (DWN3.ABR): From over DWN VORTAC via DWN R-271 and ABR R-088 to ABR VOR/DME.

TAKE-OFF OBSTACLE NOTES

RWY 10L: Multiple antennas on hangars beginning 270' from DER, 330' left of centerline, up to 26' AGL/932' MSL.
Tree 682' from DER, 668' right of centerline, 26' AGL/932' MSL.

RWY 10R: Multiple OL on poles beginning 287' from DER, 345' right of centerline, up to 36' AGL/939' MSL.
Hangar 150' from DER, 422' right of centerline, 21' AGL/920' MSL.
Antenna on building 536' from DER, 263' right of centerline, 14' AGL/913' MSL.

RWY 18: Multiple trees beginning 338' from DER, 166' left of centerline, up to 62' AGL/961' MSL.
OL on fence 176' from DER, 127' left of centerline, 10' AGL/910' MSL.
Vehicle and road 198' from DER, 196' left of centerline, 15' AGL/918' MSL.
Floodlight 148' from DER, 374' right of centerline, 38' AGL/938' MSL.
OL on hangar 282' from DER, 317' right of centerline, 37' AGL/937' MSL.

RWY 28R: Hanger 259' from DER, 355' right of centerline, 18' AGL/931' MSL.

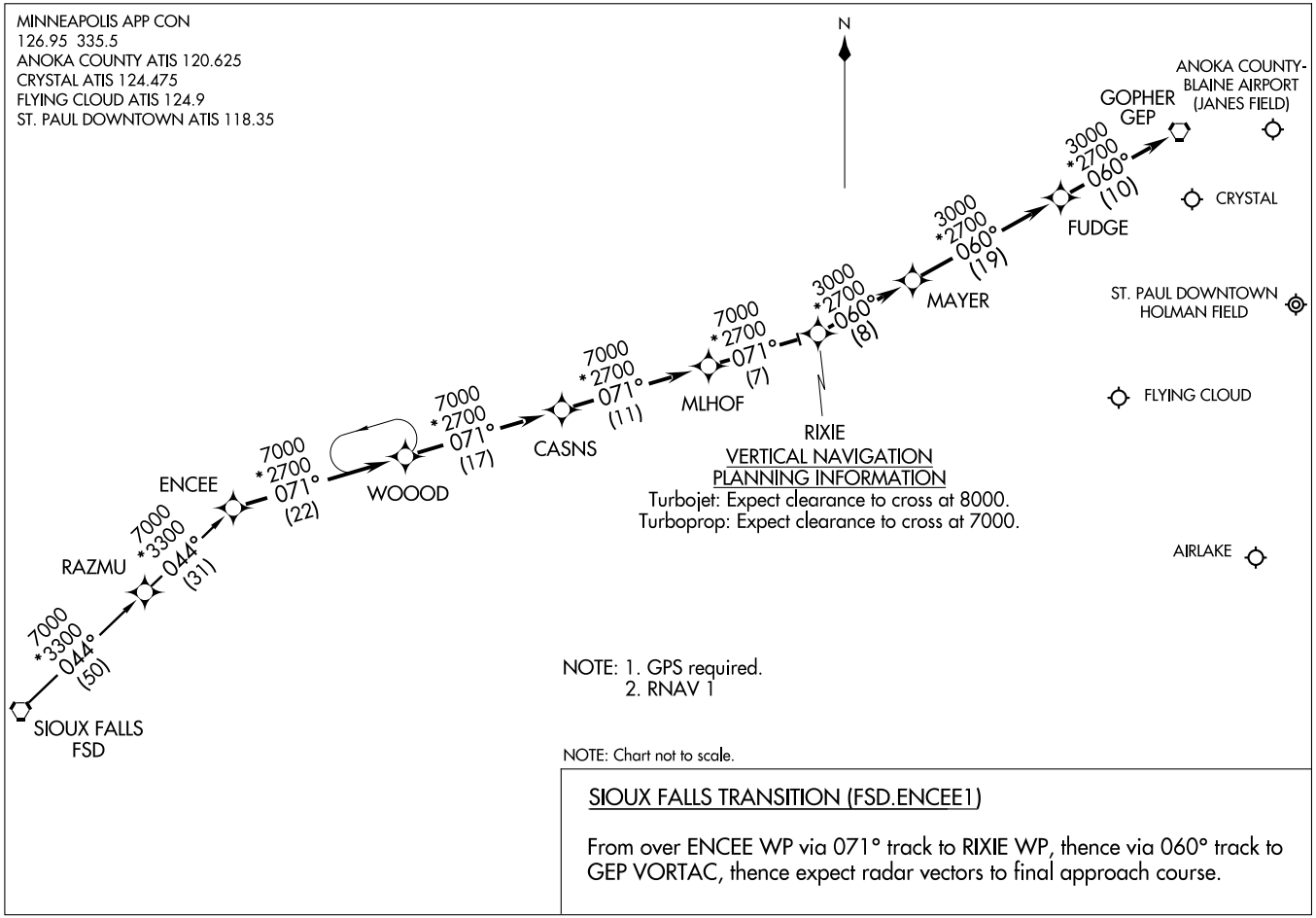
RWY 36: Wind vane 923' from DER, 404' left of centerline, 61' AGL/960' MSL.
Vent on building 943' from DER, 295' left of centerline, 44' AGL/943' MSL.
Pole 714' from DER, 351' left of centerline, 33' AGL/932' MSL.
Multiple trees beginning 504' from DER, 324' right of centerline, up to 67' AGL/966' MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010

ENCEE ONE ARRIVAL (RNAV)

(ENCEE.ENCEE1) 07242

MINNEAPOLIS-ST. PAUL, MINNESOTA



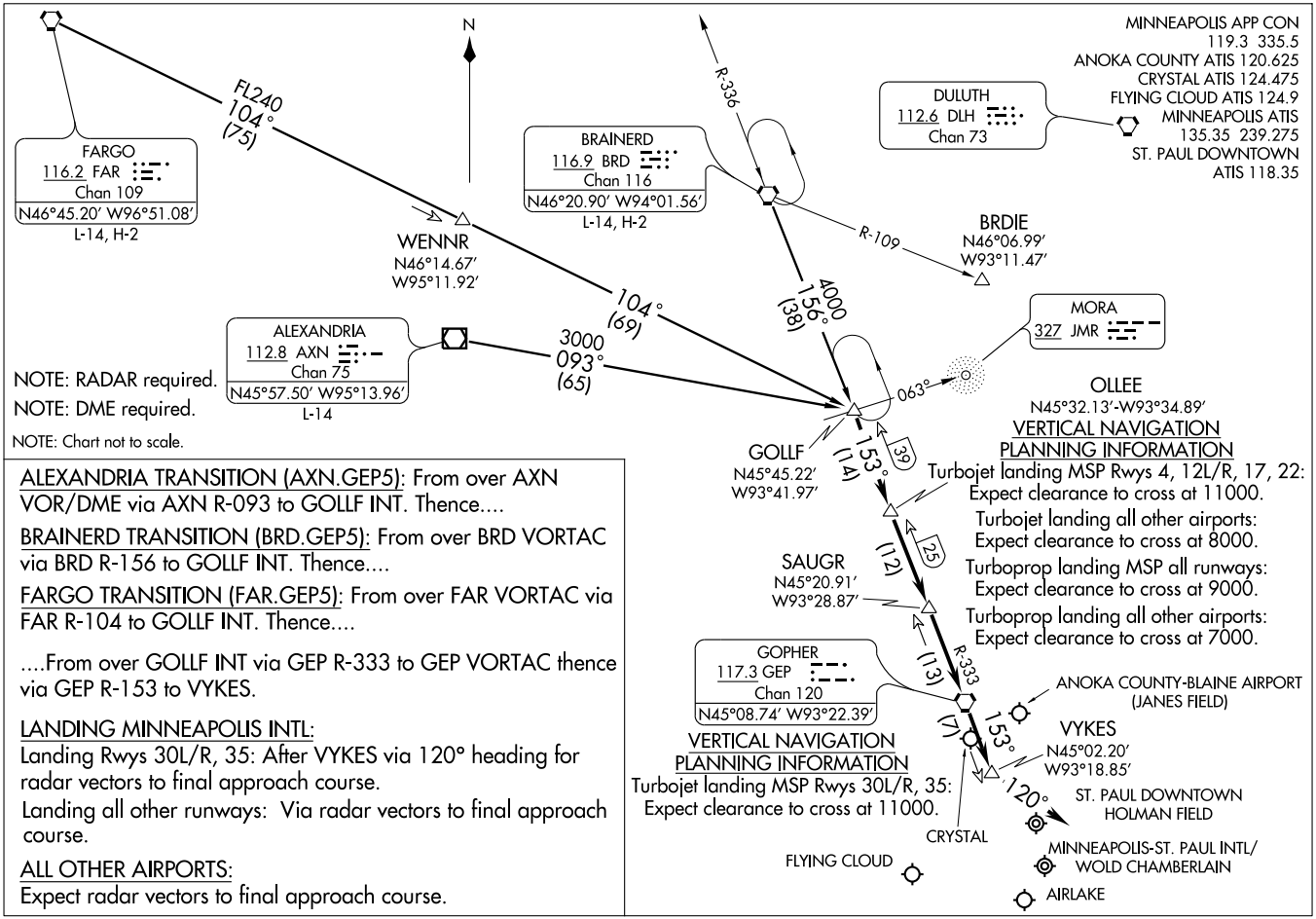
SIOUX FALLS TRANSITION (FSD.ENCEE1)

From over ENCEE WP via 071° track to RIXIE WP, thence via 060° track to GEP VORTAC, thence expect radar vectors to final approach course.

ENCEE ONE ARRIVAL (RNAV)
(ENCEE.ENCEE1) 07242
ST-263 (FAA)
MINNEAPOLIS-ST. PAUL, MINNESOTA

GOPHER FIVE ARRIVAL

(GEP.GEP5) 08157



NOTE: RADAR required.

NOTE: DME required.

NOTE: Chart not to scale.

ALEXANDRIA TRANSITION (AXN.GEP5): From over AXN VOR/DME via AXN R-093 to GOLLF INT. Thence....

BRAINERD TRANSITION (BRD.GEP5): From over BRD VORTAC via BRD R-156 to GOLLF INT. Thence....

FARGO TRANSITION (FAR.GEP5): From over FAR VORTAC via FAR R-104 to GOLLF INT. Thence....

....From over GOLLF INT via GEP R-333 to GEP VORTAC thence via GEP R-153 to VYKES.

LANDING MINNEAPOLIS INTL:

Landing Rwys 30L/R, 35: After VYKES via 120° heading for radar vectors to final approach course.

Landing all other runways: Via radar vectors to final approach course.

ALL OTHER AIRPORTS:

Expect radar vectors to final approach course.

GOPHER FIVE ARRIVAL

(GEP.GEP5) 08157

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA

MINNEAPOLIS, MINNESOTA

HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
DULUTH, MN		
DULUTH INTL (DLH)	HS 1	Rwy 27 apch area.
	HS 2	Apch end of Rwy 27 located at Twy A5.
	HS 3	Rwy 21 via Twy A and Twy C complex int.
GRAND FORKS, ND		
GRAND FORKS INTL (GFK)	HS 1	Rwy 09L and Twy A int.
	HS 2	Rwy 17R and Twy B int.
MINNEAPOLIS, MN		
CRYSTAL (MIC)	HS 1	Short distance between rwys.
	HS 2	Short distance between rwys.
	HS 3	Short distance between rwys.
	HS 4	Int of Rwy 06R (sod) on Twy F.
	HS 5	Int of Rwy 24L (sod) on Twy D.
	HS 6	Multiple vehicle/pedestrian deviations occurrence.
	HS 7	Close proximity of Rwy 14R and Rwy 06R.
	HS 8	Rwy 24R proximity to Twy E and Twy B int.
MINNEAPOLIS, MN		
FLYING CLOUD (FCM)	HS 1	Hold position markings/sign proximity to Twy A.
	HS 2	Hold position markings/sign proximity to Twy A.
	HS 3	Hold position markings/sign proximity to Twy A.
	HS 4	Hold position markings/sign proximity to Twy A.
	HS 5	Hold position markings/sign proximity to Twy A.
	HS 6	Hold position markings/sign proximity to Twy A.
	HS 7	Hold position markings/sign proximity to Twy A.
	HS 8	Hold position markings/sign proximity to Twy A.
	HS 9	Rwy 18 apch area along Twy A.
	HS 10	Proximty of parallel rwys and holding positions.
	HS 11	Short distance between rwy hold short lines.
MINNEAPOLIS, MN		
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN (MSP)	HS 1	Complex int of Twy A, Twy B, Twy C, Twy D, and Twy H in near proximity to Rwy 12R-30L and Rwy 04-22.
	HS 2	Complex twy/rwy geometry.
	HS 3	Complex int of Twy C, Twy D, Twy P, and Twy Q in near proximity to Rwy 12L-30R and Rwy 04-22.
	HS 4	Complex geometry at Rwy 04 apch end.
SIOUX FALLS, SD		
JOE FOSS FIELD (FSD)	HS 1	Complex twy int in close proximity of rwys.

21 OCT 2010 to 18 NOV 2010

21 OCT 2010 to 18 NOV 2010

*See appropriate A/FD, Alaska or Pacific Supplement HOT SPOT table for additional information.

LOC I-FCM	APP CRS	Rwy Idg	5000
109.7	098°	TDZE	905
		Apt Elev	906

ILS or LOC RWY 10R

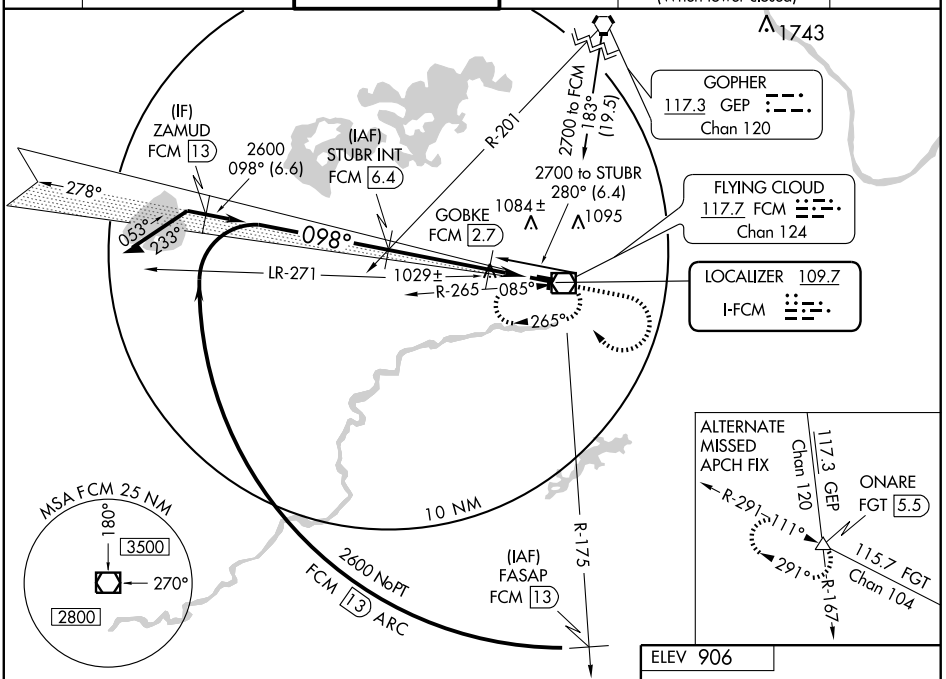
MINNEAPOLIS/ FLYING CLOUD (FCM)

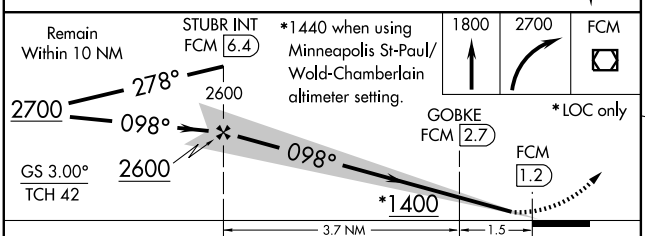
When local altimeter setting not received, use Minneapolis-St Paul Intl/ Wold Chamberlain altimeter setting and increase DA 34 feet and all MDA 40 feet, increase S-LOC Cat C and D visibility ¼ mile, GOBKE FIX minimums: Increase S-LOC Cat C visibility ¼ mile.

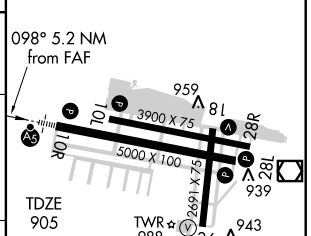
MALSR

MISSED APPROACH: Climb to 1800 then climbing right turn to 2700 direct FCM VOR/DME and hold, continue climb-in-hold to 2700.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	MINNEAPOLIS CLNC DEL	UNICOM
124.9	134.7 357.4	119.15 (CTAF) L	121.7	121.7 (When tower closed)	122.95







CATEGORY	A	B	C	D
S-ILS 10R	1105-½ 200 (200-½)			
S-LOC 10R	1400-½ 495 (500-½)		1400-¾ 495 (500-¾)	1400-1 495 (500-1)
CIRCLING	1400-1 494 (500-1)		1400-1½ 494 (500-1½)	1460-2 554 (600-2)
GOBKE FIX MINIMUMS				
S-LOC 10R	1280-½ 375 (400-½)			1280-¾ 375 (400-¾)
CIRCLING	1320-1 414 (500-1)	1360-1 454 (500-1)	1360-1½ 454 (500-1½)	1460-2 554 (600-2)

HIRL Rwy 10R-28L L
MIRL Rwys 10L-28R and 18-36 L
REIL Rwys 18, 28L, and 36 L

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

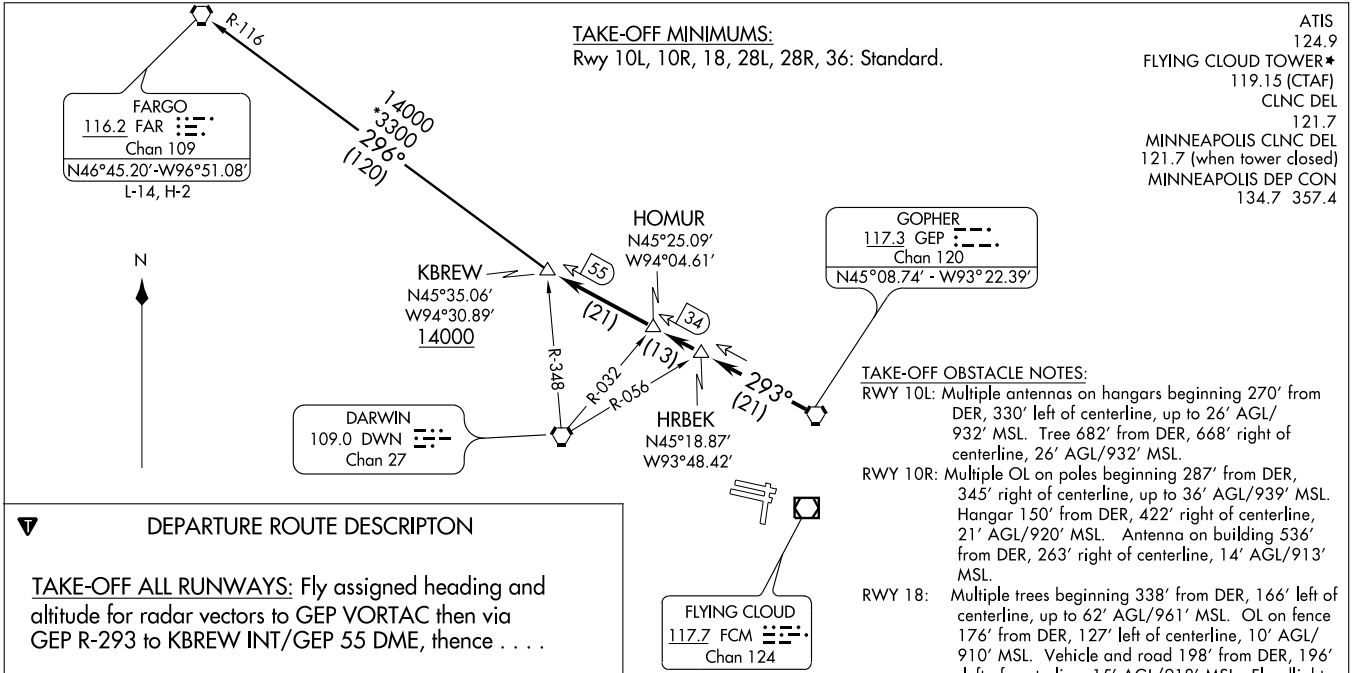
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

KBREW THREE DEPARTURE

(KBREW3.KBREW) 10154

MINNEAPOLIS/ FLYING CLOUD (FCM)

MINNEAPOLIS, MINNESOTA



TAKE-OFF MINIMUMS:
Rwy 10L, 10R, 18, 28L, 28R, 36: Standard.

ATIS
124.9
FLYING CLOUD TOWER*
119.15 (CTAF)
CLNC DEL
121.7
MINNEAPOLIS CLNC DEL
121.7 (when tower closed)
MINNEAPOLIS DEP CON
134.7 357.4

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to GEP VORTAC then via GEP R-293 to KBREW INT/GEP 55 DME, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

FARGO TRANSITION (KBREW3.FAR):
From over KBREW INT via FAR R-116 to FAR VORTAC.

TAKE-OFF OBSTACLE NOTES:

RWY 10L: Multiple antennas on hangars beginning 270' from DER, 330' left of centerline, up to 26' AGL/ 932' MSL. Tree 682' from DER, 668' right of centerline, 26' AGL/932' MSL.

RWY 10R: Multiple OL on poles beginning 287' from DER, 345' right of centerline, up to 36' AGL/939' MSL. Hangar 150' from DER, 422' right of centerline, 21' AGL/920' MSL. Antenna on building 536' from DER, 263' right of centerline, 14' AGL/913' MSL.

RWY 18: Multiple trees beginning 338' from DER, 166' left of centerline, up to 62' AGL/961' MSL. OL on fence 176' from DER, 127' left of centerline, 10' AGL/ 910' MSL. Vehicle and road 198' from DER, 196' left of centerline, 15' AGL/918' MSL. Floodlight 148' from DER, 374' right of centerline, 38' AGL/938' MSL. OL on hangar 282' from DER, 317' right of centerline, 37' AGL/937' MSL.

RWY 28R: Hangar 259' from DER, 355' right of centerline, 18' AGL/931' MSL.

RWY 36: Wind vane 923' from DER, 404' left of centerline, 61' AGL/960' MSL. Vent on building 943' from DER, 295' left of centerline, 44' AGL/943' MSL. Pole 714' from DER, 351' left of centerline, 33' AGL/932' MSL. Multiple trees beginning 504' from DER, 324' right of centerline, up to 67' AGL/ 966' MSL.

NOTE: RADAR required.

NOTE: Chart not to scale.

KBREW THREE DEPARTURE
(KBREW3.KBREW) 10154
SL-5094 (FAA)
MINNEAPOLIS/ FLYING CLOUD (FCM)
MINNEAPOLIS, MINNESOTA

ORSKY FOUR DEPARTURE

SL-5094 (FAA)

ATIS 124.9
CLNC DEL 121.7
MINNEAPOLIS CLNC DEL
121.7 (when tower closed)
MINNEAPOLIS DEP CON
134.7 357.4

GOPHER
117.3 GEP
Chan 120

MINNEAPOLIS
115.3 MSP
Chan 100
N44°53.79′ - W93°14.19′

JURNY
N44°36.52′
W93°28.34′

208° (20)

R-258

FLYING CLOUD
117.7 FCM
Chan 124

208° (13)

33

R-198

J21

(15)

48

RUMLE
N44°25.28′
W93°37.47′

FARMINGTON
115.7 FGT
Chan 104

FAIRMONT
110.2 FRM
Chan 39

(37)

85

R-318

R-268

HALWAY
111.2 FOW
Chan 49

R-074

PEDLN
N44°12.16′
W93°48.02′

ORSKY
N43°40.19′
W94°13.38′

9000
*2800
208° (26)

ONTIJ
N43°17.86′
W94°30.77′
12000 (MRA)

111

J21

12000
*3000
195° (22)

9000
*2900
176° (64)

R-278

MASON CITY
114.9 MCW
Chan 96

GOOLD
N42°57.52′
W94°42.85′

MCW
R-257

SIMJI
N42°49.56′
W94°47.52′

(9)

R-312

R-294

R-356

FORT DODGE
113.5 FOD
Chan 82
N42°36.67′-W94°17.69′
L-12, H-5

EYHUX
N42°26.13′
W95°01.16′

(25)

J21

83

(39)

R-308

DES MOINES
117.5 DSM
Chan 122

NOTE: RADAR required.

NOTE: Chart not to scale.

114.8 OBH
R-070
Chan 95

R-281

PUMKN
N41°50.54′
W95°21.52′

(44)

R-015

OMAHA
116.3 OVR
Chan 110
N41°10.04′-W95°44.20′
L-10-12, H-5

TAKE-OFF MINIMUMS
Rwy 10L/R, 18, 28L/R, 36: Standard.

(NARRATIVE ON FOLLOWING PAGE)

NC-1, 21 OCT 2010 to 18 NOV 2010

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to MSP VOR/DME then via MSP R-208 to ORSKY INT/MSP 85 DME, thence via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

FORT DODGE TRANSITION (ORSKY4.FOD): From over ORSKY INT via FOD R-356 to FOD VORTAC.

OMAHA TRANSITION (ORSKY4.OVR): From over ORSKY INT via MSP R-208 to ONTIJ INT then via OVR R-015 to OVR VORTAC.

TAKE-OFF OBSTACLE NOTES

RWY 10L: Multiple antennas on hangars beginning 270' from DER, 330' left of centerline, up to 26' AGL/932' MSL.
Tree 682' from DER, 668' right of centerline, 26' AGL/932' MSL.

RWY 10R: Multiple OL on poles beginning 287' from DER, 345' right of centerline, up to 36' AGL/939' MSL.
Hangar 150' from DER, 422' right of centerline, 21' AGL/920' MSL.
Antenna on building 536' from DER, 263' right of centerline, 14' AGL/913' MSL.

RWY 18: Multiple trees beginning 338' from DER, 166' left of centerline, up to 62' AGL/961' MSL.
OL on fence 176' from DER, 127' left of centerline, 10' AGL/910' MSL.
Vehicle and road 198' from DER, 196' left of centerline, 15' AGL/918' MSL.
Floodlight 148' from DER, 374' right of centerline, 38' AGL/938' MSL.
OL on hangar 282' from DER, 317' right of centerline, 37' AGL/937' MSL.

RWY 28R: Hangar 259' from DER, 355' right of centerline, 18' AGL/931' MSL.

RWY 36: Wind vane 923' from DER, 404' left of centerline, 61' AGL/960' MSL.
Vent on building 943' from DER, 295' left of centerline, 44' AGL/943' MSL.
Pole 714' from DER, 351' left of centerline, 33' AGL/932' MSL.
Multiple trees beginning 504' from DER, 324' right of centerline, up to 67' AGL/966' MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	3900
CH 42510	098°	TDZE	905
W10A		Apt Elev	906

RNAV (GPS) RWY 10L

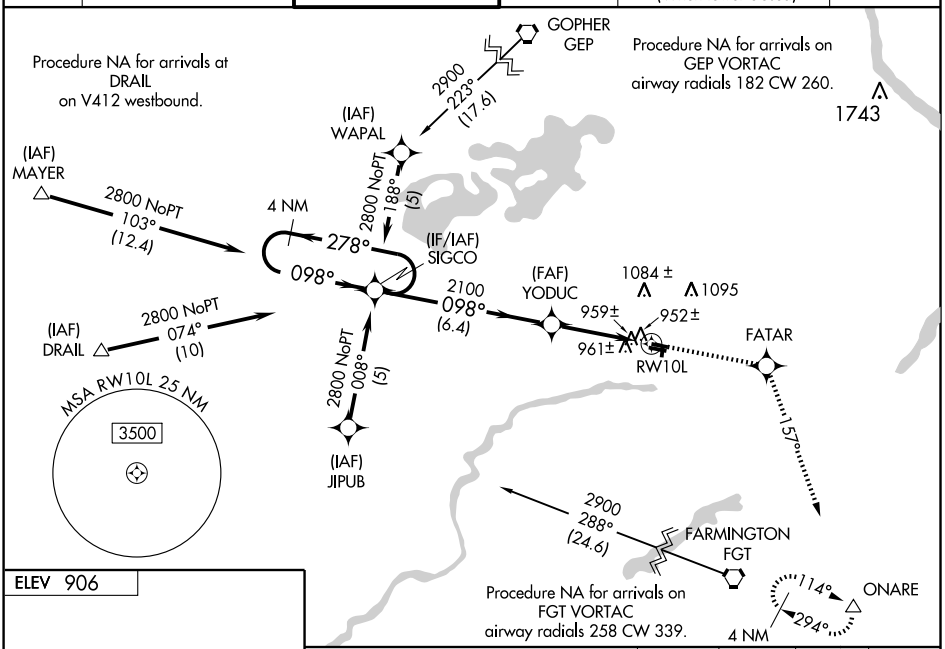
FLYING CLOUD (FCM)

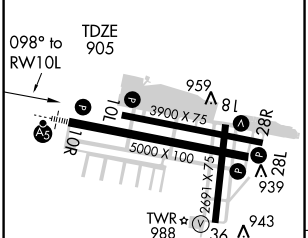
Baro-VNAV NA when using Minneapolis-St. Paul Intl/Wold Chamberlain altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 46°C (114°F). DME/DME RNP -0.3 NA.

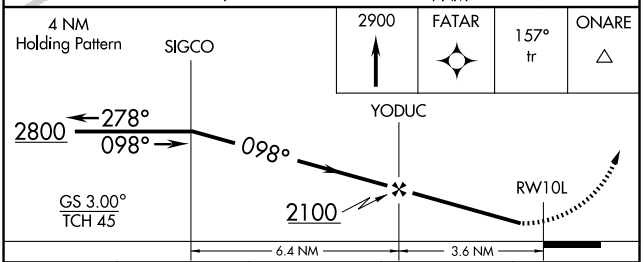
Visibility reduction by helicopters NA. When local altimeter setting not received, use Minneapolis-St. Paul Intl/Wold Chamberlain altimeter setting and increase all DA 34 feet and all MDA 40 feet and LNAV Cat D visibility ¼ mile.

MISSED APPROACH: Climb to 2900 direct FATAR and via 157° track to ONARE and hold.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	MINNEAPOLIS CLNC DEL	UNICOM
124.9	134.7 357.4	119.15 (CTAF) L	121.7	121.7 (When tower closed)	122.95







CATEGORY	A	B	C	D
LPV DA	1186-1 281 (300-1)			
LNAV/VNAV DA	1229-1¼ 324 (400-1¼)			
LNAV MDA	1240-1 335 (400-1)			
CIRCLING	1300-1 394 (400-1)	1360-1 454 (500-1)	1360-1½ 454 (500-1½)	1460-2 554 (600-2)

HIRL Rwy 10R-28L L
MIRL Rwys 10L-28R and 18-36 L
REIL Rwys 18, 28L, and 36 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS CH 42519 W10B	APP CRS 098°	Rwy Idg 5000 TDZE 905 Apt Elev 906

RNAV (GPS) RWY 10R

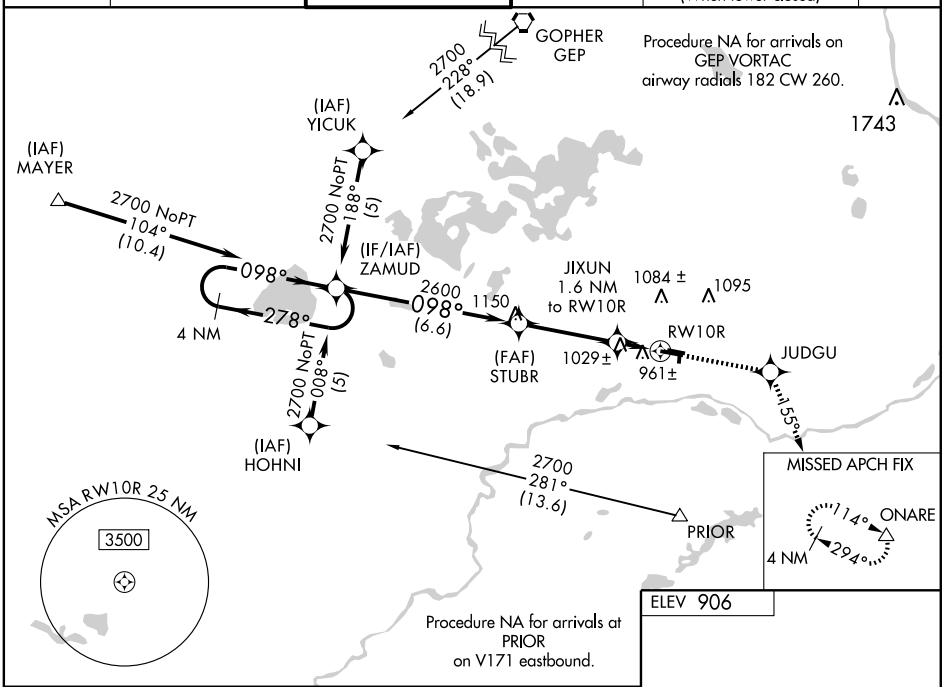
MINNEAPOLIS/ FLYING CLOUD (FCM)

Baro-VNAV NA when using Minneapolis-St Paul Intl/Wold Chamberlain altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Minneapolis-St Paul Intl/Wold Chamberlain altimeter setting and increase all DA 34 feet and all MDA 40 feet and increase LNAV Cat C visibility ¼ mile. For inoperative MALSR increase LNAV Cat D visibility to 1¼.

MALSR

MISSED APPROACH: Climb to 3000 direct JUDGU and on track 155° to ONARE and hold.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	MINNEAPOLIS CLNC DEL	UNICOM
124.9	134.7 357.4	119.15 (CTAF) L	121.7	121.7 (When tower closed)	122.95



CATEGORY	A	B	C	D
LPV DA	1105-½ 200 (200-½)			
LNAV/VNAV DA	1237-¾ 332 (400-¾)			
LNAV MDA	1280-½ 375 (400-½)			1280-1 375 (400-1)
CIRCLING	1320-1 414 (500-1)	1360-1 454 (500-1)	1360-1½ 454 (500-1½)	1460-2 554 (600-2)

HIRL Rwy 10R-28L L
MIRL Rwys 10L-28R and 18-36 L
REIL Rwys 18, 28L, and 36 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 28L

MINNEAPOLIS/ FLYING CLOUD (FCM)

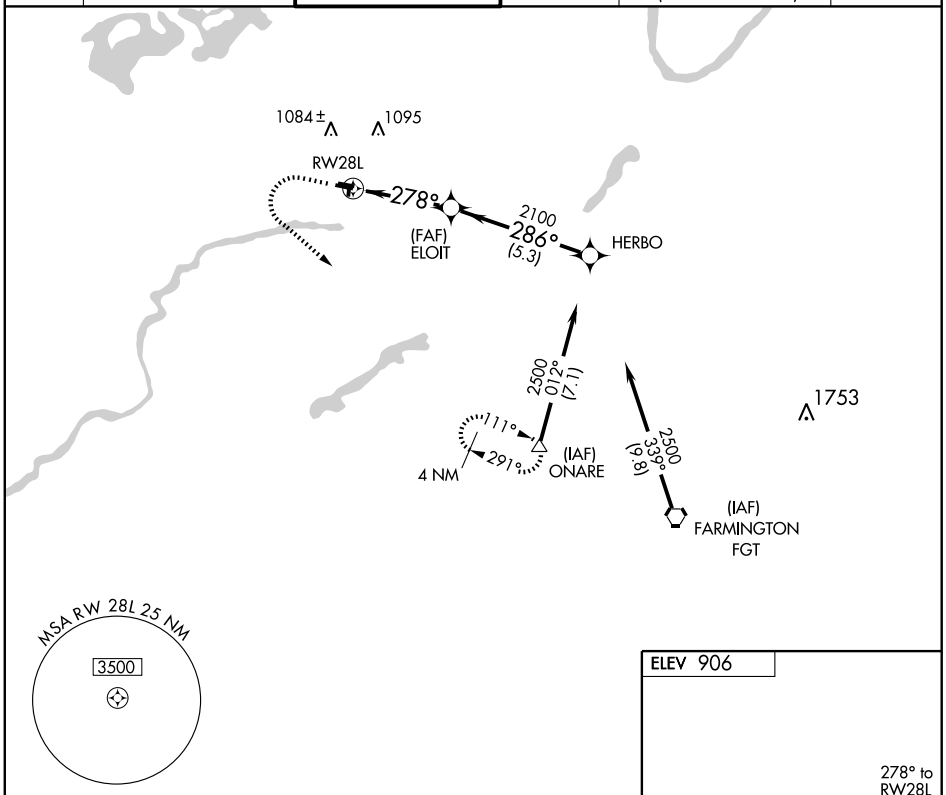
APP CRS	Rwy Idg	5000
278°	TDZE	906
	Apt Elev	906

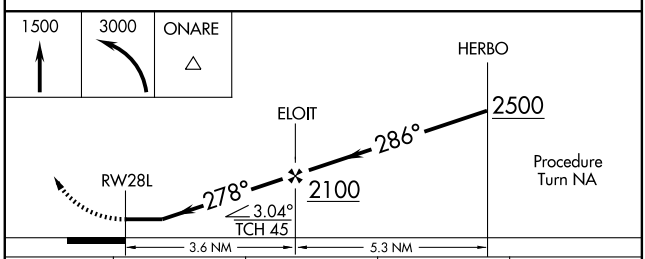
GPS or RNP- 0.3 required.
DME/DME RNP- 0.3 NA.

NA

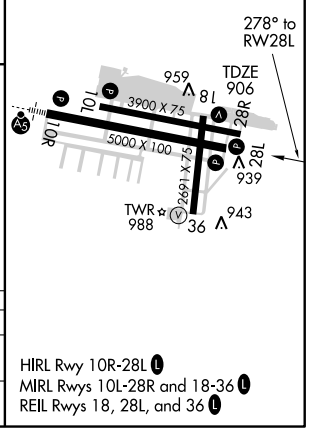
MISSED APPROACH: Climb to 1500 then climbing left turn to 3000 direct ONARE WP and hold.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	MINNEAPOLIS CLNC DEL	UNICOM
124.9	134.7 357.4	119.15 (CTAF) L	121.7	121.7 (When tower closed)	122.95





CATEGORY	A	B	C	D
LNAV MDA	1280-1 374 (400-1)			1280-1¼ 374 (400-1¼)
CIRCLING	1320-1 414 (500-1)	1360-1 454 (500-1)	1360-1½ 454 (500-1½)	1460-2 554 (600-2)



HIRL Rwy 10R-28L L
MIRL Rwys 10L-28R and 18-36 L
REIL Rwys 18, 28L, and 36 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	3900
CH 99709	278°	TDZE	900
W28A		Apt Elev	906

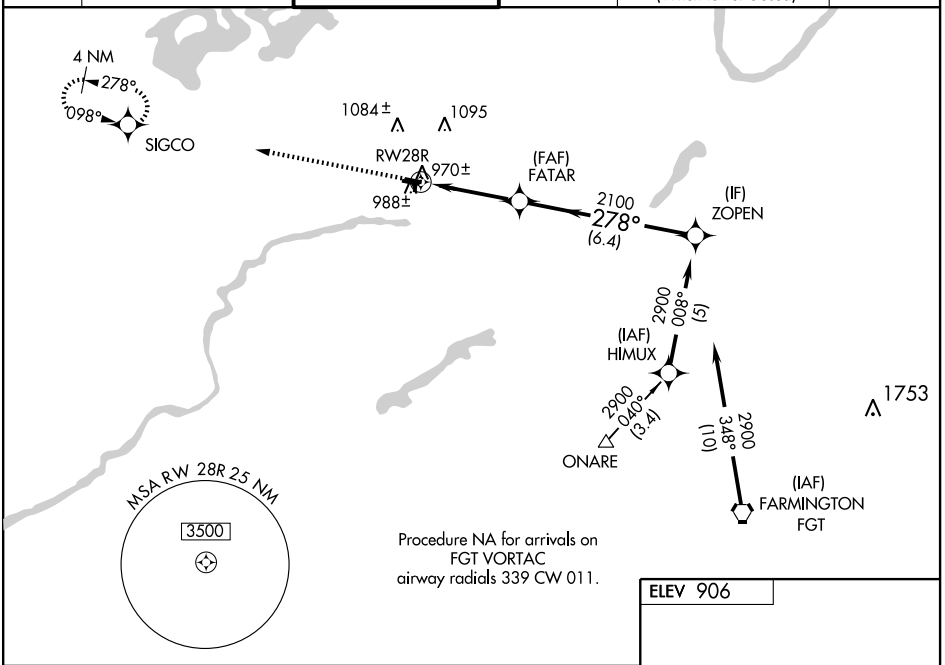
RNAV (GPS) RWY 28R

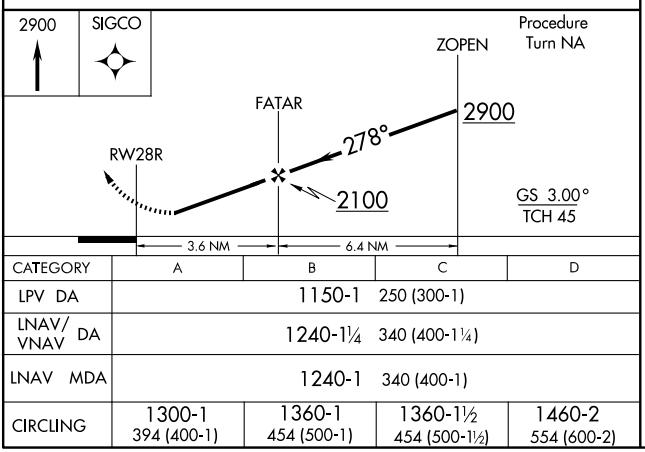
MINNEAPOLIS/ FLYING CLOUD (FCM)

DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.
When local altimter setting not received, use Minneapolis-St. Paul Intl/Wold Chamberlain altimeter setting and increase all DA 34 feet and all MDA 40 feet and LNAV Cat D visibility ¼ mile. Baro-VNAV NA when using Minneapolis-St Paul Intl/Wold Chamberlain altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16° C (4°F) or above 46°C (114°F).

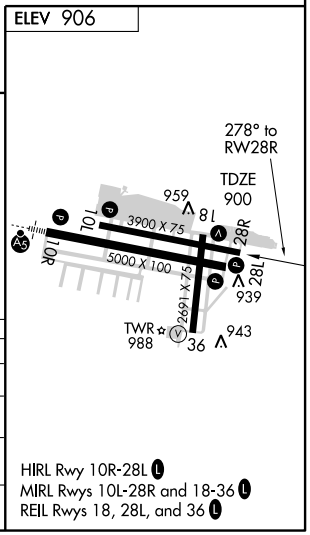
MISSED APPROACH: Climb to 2900 direct SIGCO and hold.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	MINNEAPOLIS CLNC DEL	UNICOM
124.9	134.7 357.4	119.15 (CTAF) L	121.7	121.7 (When tower closed)	122.95





CATEGORY	A	B	C	D
LPV DA	1150-1 250 (300-1)			
LNAV/ VNAV DA	1240-1¼ 340 (400-1¼)			
LNAV MDA	1240-1 340 (400-1)			
CIRCLING	1300-1 394 (400-1)	1360-1 454 (500-1)	1360-1½ 454 (500-1½)	1460-2 554 (600-2)



HIRL Rwy 10R-28L L
MIRL Rwys 10L-28R and 18-36 L
REIL Rwys 18, 28L, and 36 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	2691
003°	TDZE	905
	Apt Elev	906

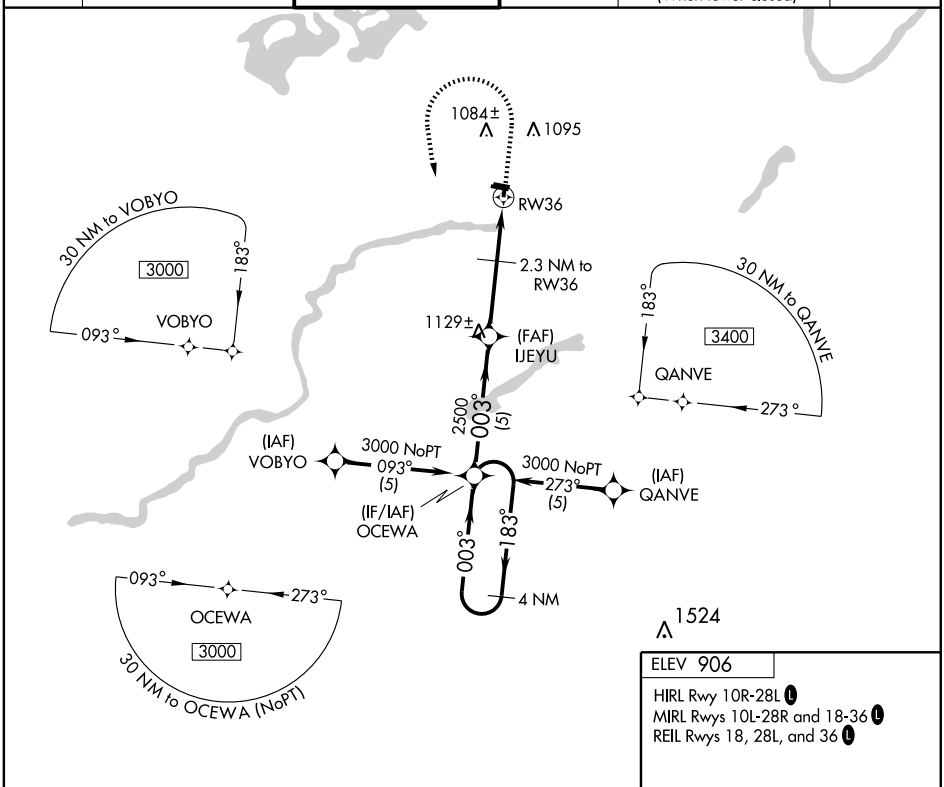
RNAV (GPS) RWY 36

MINNEAPOLIS/ FLYING CLOUD (FCM)

GPS or RNP- 0.3 required.
NA DME/DME RNP- 0.3 NA.

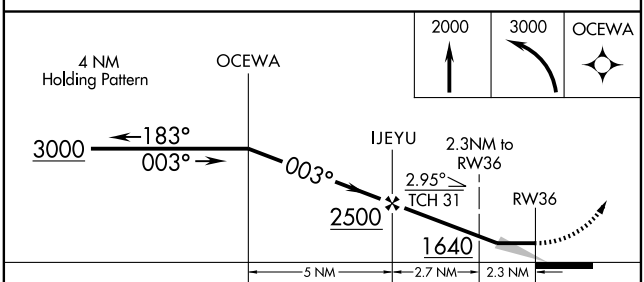
MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct OCEWA WP and hold.

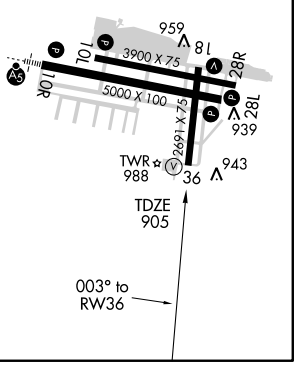
ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	MINNEAPOLIS CLNC DEL	UNICOM
124.9	134.7 357.4	119.15 (CTAF) L	121.7	121.7 (When tower closed)	122.95



ELEV 906

HIRL Rwy 10R-28L L
MIRL Rwys 10L-28R and 18-36 L
REIL Rwys 18, 28L, and 36 L





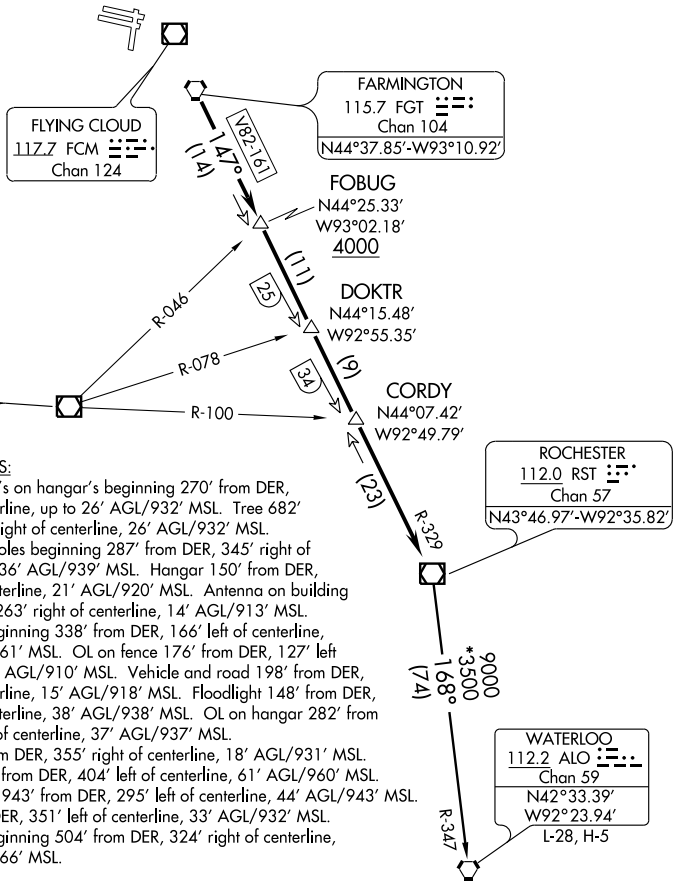
CATEGORY	A	B	C	D
LNAV MDA	1240-1 335 (400-1)			NA
CIRCLING	1320-1 414 (500-1)	1360-1 454 (500-1)	1360-1½ 454 (500-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ROCHESTER FOUR DEPARTURE

SL-5094 (FAA)

ATIS 124.9
CLNC DEL
121.7
MINNEAPOLIS CLNC DEL
121.7 (when tower closed)
MINNEAPOLIS DEP CON
134.7 357.4



TAKE-OFF OBSTACLE NOTES:

RWY 10L: Multiple antenna's on hangar's beginning 270' from DER, 330' left of centerline, up to 26' AGL/932' MSL. Tree 682' from DER, 668' right of centerline, 26' AGL/932' MSL.

RWY 10R: Multiple OL on poles beginning 287' from DER, 345' right of centerline, up to 36' AGL/939' MSL. Hangar 150' from DER, 422' right of centerline, 21' AGL/920' MSL. Antenna on building 536' from DER, 263' right of centerline, 14' AGL/913' MSL.

RWY 18: Multiple trees beginning 338' from DER, 166' left of centerline, up to 62' AGL/961' MSL. OL on fence 176' from DER, 127' left of centerline, 10' AGL/910' MSL. Vehicle and road 198' from DER, 196' left of centerline, 15' AGL/918' MSL. Floodlight 148' from DER, 374' right of centerline, 38' AGL/938' MSL. OL on hangar 282' from DER, 317' right of centerline, 37' AGL/937' MSL.

RWY 28R: Hangar 259' from DER, 355' right of centerline, 18' AGL/931' MSL.

RWY 36: Wind vane 923' from DER, 404' left of centerline, 61' AGL/960' MSL. Vent on building 943' from DER, 295' left of centerline, 44' AGL/943' MSL. Pole 714' from DER, 351' left of centerline, 33' AGL/932' MSL. Multiple trees beginning 504' from DER, 324' right of centerline, up to 67' AGL/966' MSL.

TAKE-OFF MINIMUMS:
Rwy 10L, 10R, 18, 28L, 28R, 36: Standard.

NOTE: RADAR required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS:
Fly assigned heading and altitude for radar vectors to FGT VORTAC then via FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/FGT 14 DME at or above 4000, Thence . . . .

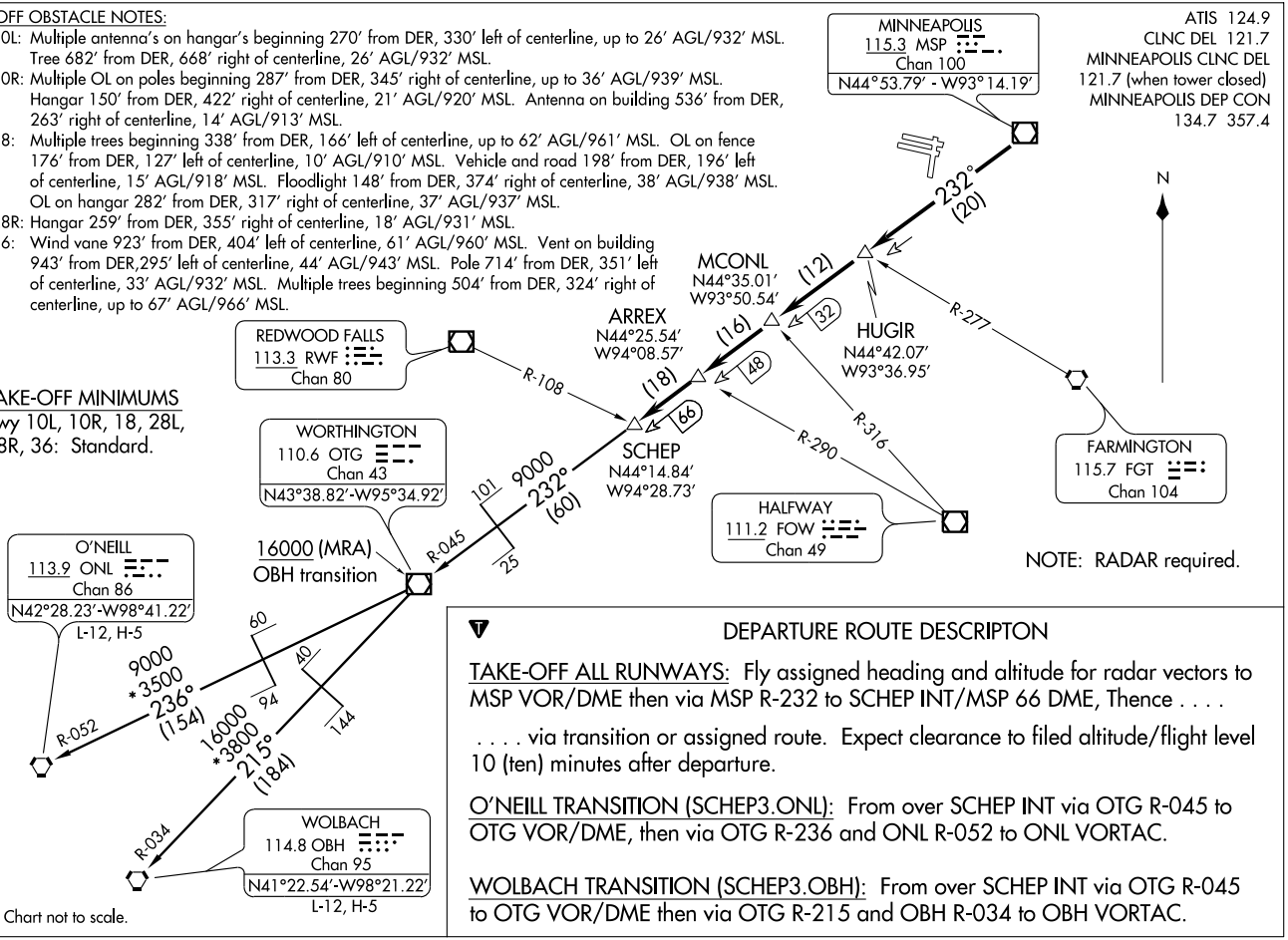
. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

WATERLOO TRANSITION (RST4.ALO): From over RST VOR/DME via RST R-168 and ALO R-347 to ALO VORTAC.

NC-1, 21 OCT 2010 to 18 NOV 2010

TAKE-OFF OBSTACLE NOTES:
RWY 10L: Multiple antenna's on hangar's beginning 270' from DER, 330' left of centerline, up to 26' AGL/932' MSL. Tree 682' from DER, 668' right of centerline, 26' AGL/932' MSL.
RWY 10R: Multiple OL on poles beginning 287' from DER, 345' right of centerline, up to 36' AGL/939' MSL. Hangar 150' from DER, 422' right of centerline, 21' AGL/920' MSL. Antenna on building 536' from DER, 263' right of centerline, 14' AGL/913' MSL.
RWY 18: Multiple trees beginning 338' from DER, 166' left of centerline, up to 62' AGL/961' MSL. OL on fence 176' from DER, 127' left of centerline, 10' AGL/910' MSL. Vehicle and road 198' from DER, 196' left of centerline, 15' AGL/918' MSL. Floodlight 148' from DER, 374' right of centerline, 38' AGL/938' MSL. OL on hangar 282' from DER, 317' right of centerline, 37' AGL/937' MSL.
RWY 28R: Hangar 259' from DER, 355' right of centerline, 18' AGL/931' MSL.
RWY 36: Wind vane 923' from DER, 404' left of centerline, 61' AGL/960' MSL. Vent on building 943' from DER,295' left of centerline, 44' AGL/943' MSL. Pole 714' from DER, 351' left of centerline, 33' AGL/932' MSL. Multiple trees beginning 504' from DER, 324' right of centerline, up to 67' AGL/966' MSL.

TAKE-OFF MINIMUMS
Rwy 10L, 10R, 18, 28L, 28R, 36: Standard.



DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to MSP VOR/DME then via MSP R-232 to SCHEP INT/MSP 66 DME, Thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

O'NEILL TRANSITION (SCHEP3.ONL): From over SCHEP INT via OTG R-045 to OTG VOR/DME, then via OTG R-236 and ONL R-052 to ONL VORTAC.

WOLBACH TRANSITION (SCHEP3.OBH): From over SCHEP INT via OTG R-045 to OTG VOR/DME then via OTG R-215 and OBH R-034 to OBH VORTAC.

TWOLF TWO ARRIVAL

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA

NC-1, 21 OCT 2010 to 18 NOV 2010

MINNEAPOLIS APP CON
126.95 335.5
118.72 (MSP RWY 35)
MINNEAPOLIS ATIS
135.35 239.275
ANOKA COUNTY ATIS 120.625
CRYSTAL ATIS 124.475
FLYING CLOUD ATIS 124.9
ST. PAUL DOWNTOWN ATIS
118.35

L.O. SIMENSTAD MUNI

ANOKA COUNTY-BLAINE AIRPORT
(JANES FIELD)

NEW RICHMOND RGNL

GOPHER
117.3 GEP
Chan 120

CRYSTAL

ST. PAUL DOWNTOWN HOLMAN FIELD

FLYING CLOUD

300°

MINNEAPOLIS-ST. PAUL INTL/
WOLD CHAMBERLAIN

FLYING CLOUD
117.7 FCM
Chan 124
N44°49.54′-W93°27.41′

R-180

R-178

R-103

SLIKK
N44°47.90′
W93°17.21′

330°
(11)

AIRLAKE

FARMINGTON
115.7 FGT
Chan 104
N44°37.86′-W93°10.92′

TRGET
N44°13.88′-W93°27.73′

VERTICAL NAVIGATION
PLANNING INFORMATION

MSP: Expect clearance to cross at 11000.
All other airports:
Turbojets: Expect clearance to cross at 8000.
Turboprops: Expect clearance to cross at 7000.

5000
(36)
360°

(8)

R-201

GDNEE
N44°30.68′
W93°15.98′

17

(9)

55

PIKKL
N44°22.82′
W93°21.49′

021°
5000
(10)

R-081

6000

62

(7)

MANKATO
110.8 MKT
Chan 45

LYNKS
N44°06.89′
W93°28.39′

8000
(22)

84

KGEEE
N43°44.94′
W93°30.47′

12000
358°
(28)

112

TWOLF
N43°17.00′
W93°33.09′

FORT DODGE
113.5 FOD
Chan 82
N42°36.67′-W94°17.69′
L-12, H-5

12000
032°
(30)

52

R-178
GEP

NOTE: DME and RADAR Required.

12000
*2900
032°
(22)

TICKT
N42°53.71′
W93°59.01′

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

TWOLF TWO ARRIVAL

MINNEAPOLIS, MINNESOTA

(TWOLF.TWOLF2) 10154

ARRIVAL DESCRIPTION

FORT DODGE TRANSITION (FOD.TWOLF2): From over FOD VORTAC via FOD R-032 to TWOLF/FOD 52 DME, Thence . . . .

....From over TWOLF/GEP 112 DME via GEP R-178 to KGEEE/GEP 84 DME, then as depicted to TRGET INT/GEP 55 DME. Thence....

LANDING MSP RWYS 12L/R: From over TRGET INT via FGT R-201 to FGT VORTAC, then via FGT R-330 to SLIKK INT/FGT 11 DME, then via heading 300° for radar vectors to final approach course.

LANDING MSP RWYS 30L/R, 4, 22, 17, 35: From over TRGET INT via FGT R-201 to FGT VORTAC, then via radar vectors to final approach course.

LANDING ALL OTHER AIRPORTS: From over TRGET INT via FCM R-180 to FCM VOR/DME, then expect radar vectors to final approach course.

NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME FCM 117.7 Chan 124	APP CRS 035°	Rwy ldg 2691 TDZE 905 Apt Elev 906

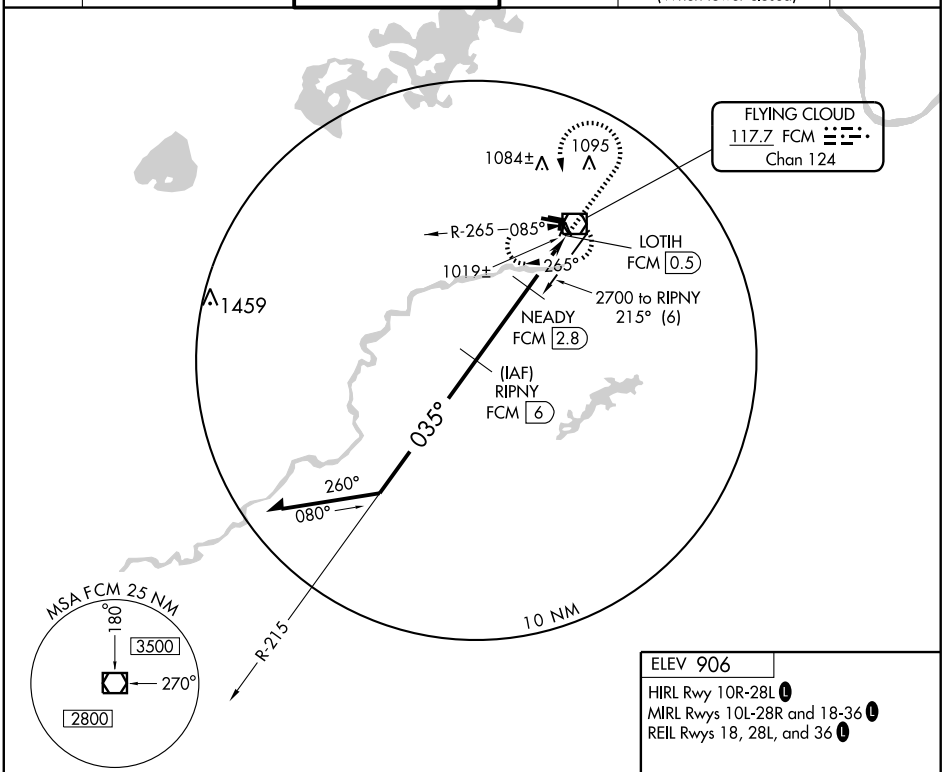
VOR/DME RWY 36

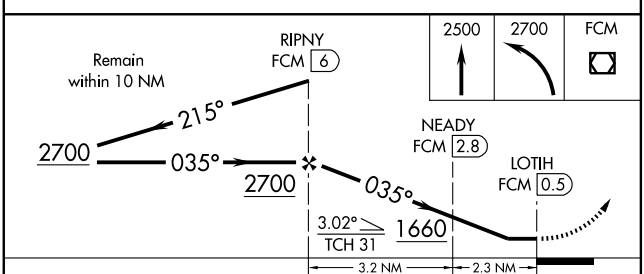
MINNEAPOLIS/ FLYING CLOUD (FCM)

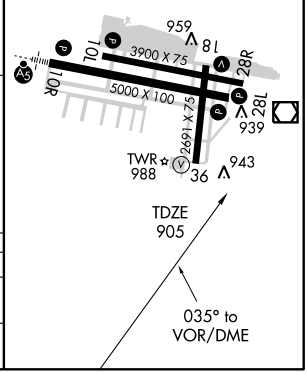
Visibility reduction by helicopters NA. When local altimeter setting not received, use Minneapolis St Paul Intl/Wold Chamberlain altimeter setting and increase all MDA 40 feet and S-36 Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 2500 then climbing left turn to 2700 direct FCM VOR/DME and hold.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	MINNEAPOLIS CLNC DEL	UNICOM
124.9	134.7 357.4	119.15 (CTAF) L	121.7	121.7 (When tower closed)	122.95







CATEGORY	A	B	C	D
S-36	1280-1 375 (400-1)			NA
CIRCLING	1320-1 414 (500-1)	1360-1 454 (500-1)	1360-1½ 454 (500-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME FCM 117.7 Chan 124	APP CRS 100°	Rwy Idg 5000 TDZE 905 Apt Elev 906

VOR RWY 10R

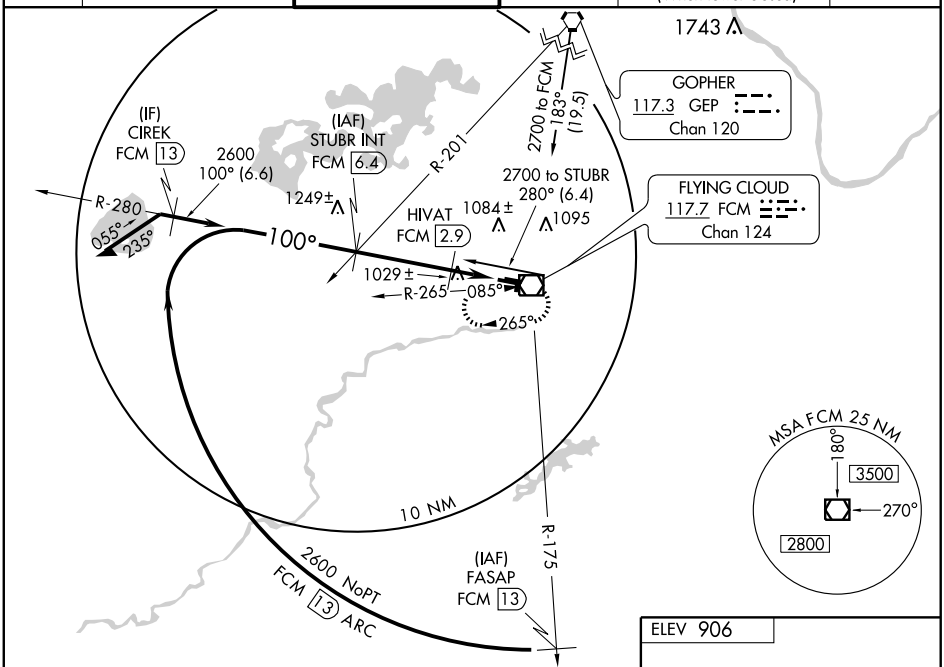
MINNEAPOLIS/ FLYING CLOUD (FCM)

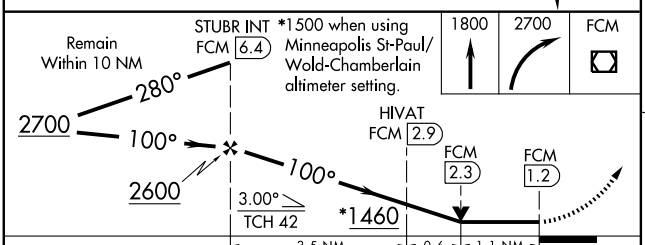
When local altimeter setting not received, use Minneapolis St-Paul/Wold-Chamberlain altimeter setting and increase all MDA 40 feet, HIVAT FIX minimums: Increase S-10R Cat C visibility ¼ mile. For inoperative MALSR, HIVAT FIX minimums: Increase S-10R Cat D visibility to 1¼ mile. VDP NA when using Minneapolis St-Paul/Wold-Chamberlain altimeter setting.

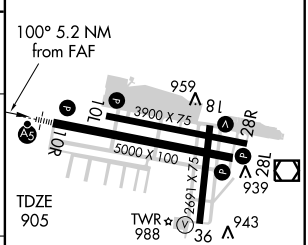
MALSR

MISSED APPROACH: Climb to 1800 then climbing right turn to 2700 direct FCM VOR/DME and hold, continue climb-in-hold to 2700.

ATIS	MINNEAPOLIS APP CON	FLYING CLOUD TOWER ★	GND CON	MINNEAPOLIS CLNC DEL	UNICOM
124.9	134.7 357.4	119.15 (CTAF)	121.7	121.7 (When tower closed)	122.95







CATEGORY	A	B	C	D
S-10R	1460-½ 555 (600-½)		1460-1 555 (600-1)	1460-1¼ 555 (600-1¼)
CIRCLING	1460-1 554 (600-1)		1460-1½ 554 (600-1½)	1460-2 554 (600-2)
HIVAT FIX MINIMUMS				
S-10R	1280-½ 375 (400-½)			1280-1 375 (400-1)
CIRCLING	1320-1 414 (500-1)	1360-1 454 (500-1)	1360-1½ 454 (500-1½)	1460-2 554 (600-2)

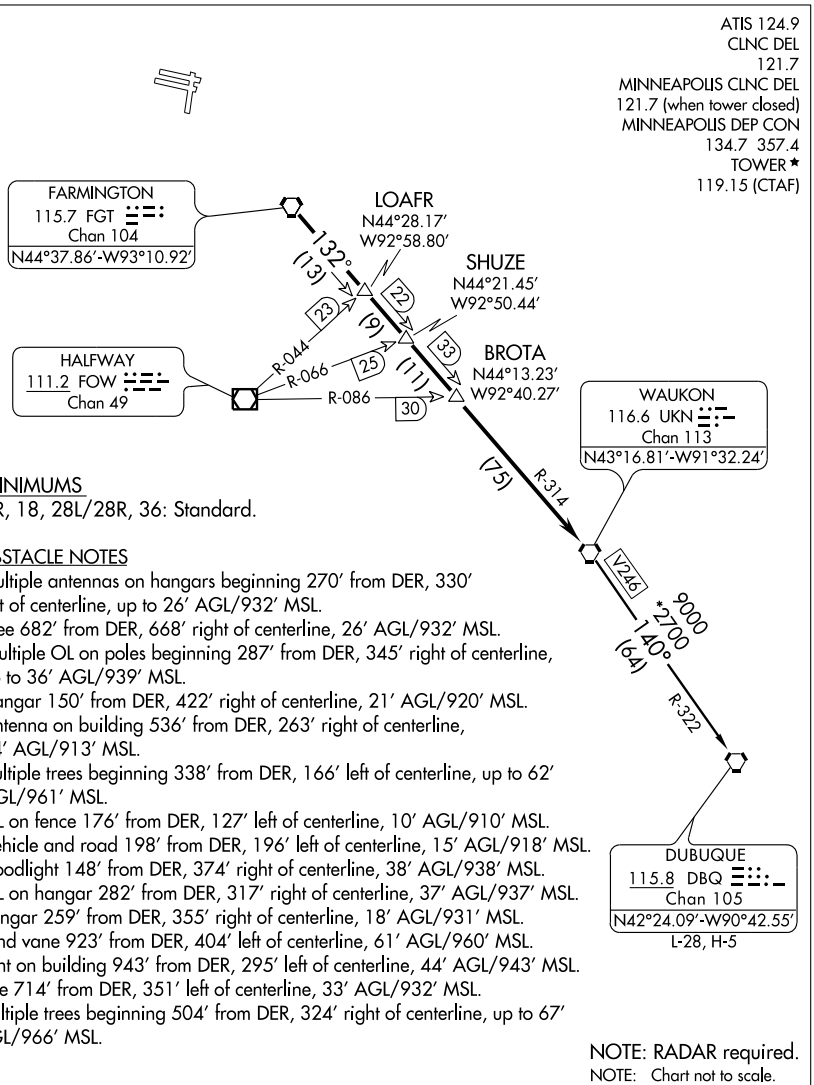
HIRL Rwy 10R-28L (L)
MIRL Rwys 10L-28R and 18-36 (L)
REIL Rwys 18, 28L, and 36 (L)

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAUKON THREE DEPARTURE

SL-5094 (FAA)



TAKE-OFF MINIMUMS

Rwy 10L/10R, 18, 28L/28R, 36: Standard.

TAKE-OFF OBSTACLE NOTES

RWY 10L: Multiple antennas on hangars beginning 270' from DER, 330' left of centerline, up to 26' AGL/932' MSL.
Tree 682' from DER, 668' right of centerline, 26' AGL/932' MSL.

RWY 10R: Multiple OL on poles beginning 287' from DER, 345' right of centerline, up to 36' AGL/939' MSL.
Hangar 150' from DER, 422' right of centerline, 21' AGL/920' MSL.
Antenna on building 536' from DER, 263' right of centerline, 14' AGL/913' MSL.

RWY 18: Multiple trees beginning 338' from DER, 166' left of centerline, up to 62' AGL/961' MSL.
OL on fence 176' from DER, 127' left of centerline, 10' AGL/910' MSL.
Vehicle and road 198' from DER, 196' left of centerline, 15' AGL/918' MSL.
Floodlight 148' from DER, 374' right of centerline, 38' AGL/938' MSL.
OL on hangar 282' from DER, 317' right of centerline, 37' AGL/937' MSL.

RWY 28R: Hangar 259' from DER, 355' right of centerline, 18' AGL/931' MSL.

RWY 36: Wind vane 923' from DER, 404' left of centerline, 61' AGL/960' MSL.
Vent on building 943' from DER, 295' left of centerline, 44' AGL/943' MSL.
Pole 714' from DER, 351' left of centerline, 33' AGL/932' MSL.
Multiple trees beginning 504' from DER, 324' right of centerline, up to 67' AGL/966' MSL.

NOTE: RADAR required.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to FGT VORTAC then via FGT R-132 and UKN R-314 to UKN VORTAC, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

DUBUQUE TRANSITION (UKN3.DBQ): From over UKN VORTAC via UKN R-140 and DBQ R-322 to DBQ VORTAC.

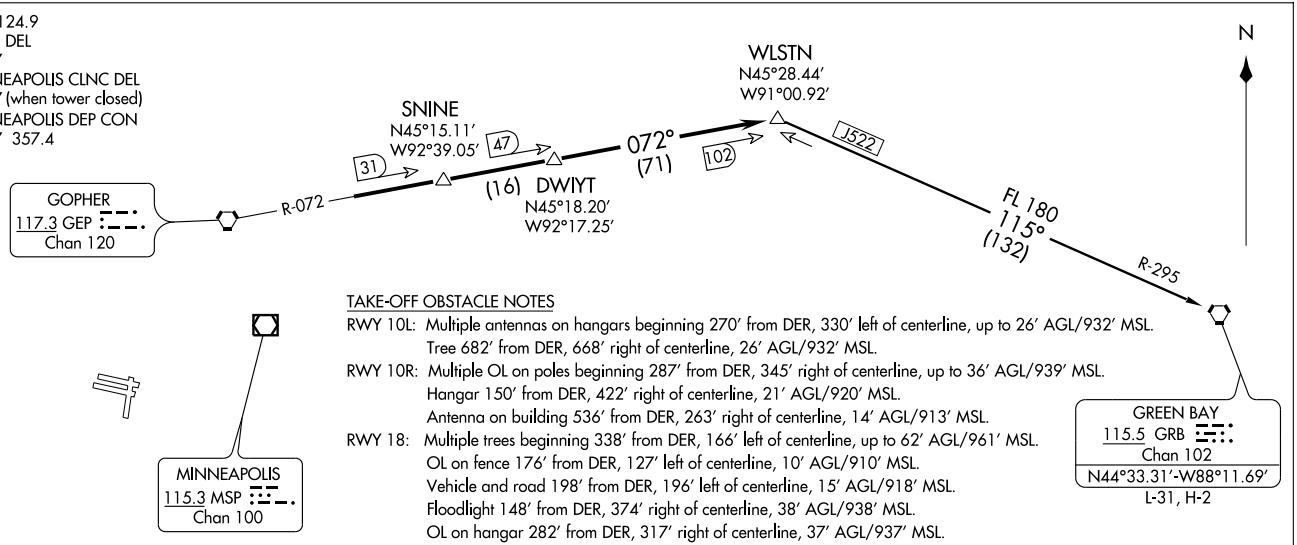
NC-1, 21 OCT 2010 to 18 NOV 2010

WLSTN THREE DEPARTURE

(WLSTN3.WLSTN) 10042

(WLSTN3.WLSTN) 10042

WLSTN THREE DEPARTURE



TAKE-OFF OBSTACLE NOTES

RWY 10L: Multiple antennas on hangars beginning 270' from DER, 330' left of centerline, up to 26' AGL/932' MSL.
Tree 682' from DER, 668' right of centerline, 26' AGL/932' MSL.

RWY 10R: Multiple OL on poles beginning 287' from DER, 345' right of centerline, up to 36' AGL/939' MSL.
Hangar 150' from DER, 422' right of centerline, 21' AGL/920' MSL.
Antenna on building 536' from DER, 263' right of centerline, 14' AGL/913' MSL.

RWY 18: Multiple trees beginning 338' from DER, 166' left of centerline, up to 62' AGL/961' MSL.
OL on fence 176' from DER, 127' left of centerline, 10' AGL/910' MSL.
Vehicle and road 198' from DER, 196' left of centerline, 15' AGL/918' MSL.
Floodlight 148' from DER, 374' right of centerline, 38' AGL/938' MSL.
OL on hangar 282' from DER, 317' right of centerline, 37' AGL/937' MSL.

RWY 28R: Hangar 259' from DER, 355' right of centerline, 18' AGL/931' MSL.

RWY 36: Wind vane 923' from DER, 404' left of centerline, 61' AGL/960' MSL.
Vent on building 943' from DER, 295' left of centerline, 44' AGL/943' MSL.
Pole 714' from DER, 351' left of centerline, 33' AGL/932' MSL.
Multiple trees beginning 504' from DER, 324' right of centerline, up to 67' AGL/966' MSL.

TAKE-OFF MINIMUMS

Rwy 10L, 10R, 18, 28L, 28R, 36: Standard.

NOTE: RADAR and DME required.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to GEP R-072 to WLSTN/GEP 102 DME, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/ flight level 10 (ten) minutes after departure.

GREEN BAY TRANSITION (WLSTN3.GRB): From over WLSTN via GRB R-295 to GRB VORTAC.

SL-5094 (FAA)

MINNEAPOLIS/ FLYING CLOUD (FCM)
MINNEAPOLIS, MINNESOTA

MINNEAPOLIS/ FLYING CLOUD (FCM)
MINNEAPOLIS, MINNESOTA

ZMBRO THREE DEPARTURE

(ZMBRO3.ZMBRO) 10042

ATIS 124.9
CLNC DEL
121.7
MINNEAPOLIS CLNC DEL
121.7 (when tower closed)
MINNEAPOLIS DEP CON
134.7 357.4

MINNEAPOLIS
115.3 MSP
Chan 100

TAKE-OFF OBSTACLE NOTES:

RWY 10L: Multiple antenna's on hangar's beginning 270' from DER, 330' left of centerline, up to 26' AGL/932' MSL. Tree 682' from DER, 668' right of centerline, 26' AGL/932' MSL.

RWY 10R: Multiple OL on poles beginning 287' from DER, 345' right of centerline, up to 36' AGL/939' MSL. Hangar 150' from DER, 422' right of centerline, 21' AGL/920' MSL. Antenna on building 536' from DER, 263' right of centerline, 14' AGL/913' MSL.

RWY 18: Multiple trees beginning 338' from DER, 166' left of centerline, up to 62' AGL/961' MSL. OL on fence 176' from DER, 127' left of centerline, 10' AGL/910' MSL. Vehicle and road 198' from DER, 196' left of centerline, 15' AGL/918' MSL. Floodlight 148' from DER, 374' right of centerline, 38' AGL/938' MSL. OL on hangar 282' from DER, 317' right of centerline, 37' AGL/937' MSL.

RWY 28R: Hangar 259' from DER, 355' right of centerline, 18' AGL/931' MSL.

RWY 36: Wind vane 923' from DER, 404' left of centerline, 61' AGL/960' MSL. Vent on building 943' from DER, 295' left of centerline, 44' AGL/943' MSL. Pole 714' from DER, 351' left of centerline, 33' AGL/932' MSL. Multiple trees beginning 504' from DER, 324' right of centerline, up to 67' AGL/966' MSL.

R-138

138°

34

JEDET
N44°27.68'
W92°43.68'
4000

121°
(14)

ZMBRO
N44°20.50'
W92°26.91'

TAKE-OFF MINIMUMS:
Rwy 10L, 10R, 18, 28L, 28R, 36: Standard.

R-059

HALWAY
111.2 FOW
Chan 49

R-006

9000
*2800
121°
(50)

NODINE
117.9 ODI
Chan 126
N43°54.74'-W91°28.05'
L-28, H-2

ROCHESTER
112.0 RST
Chan 57

R-301

N

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Fly assigned heading and altitude for radar vectors to MSP VOR/DME then via MSP R-138 to JEDET INT/ MSP 34 DME, at or above 4000; then via ODI R-301 to ZMBRO INT/ ODI 50 DME, Thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

NODINE TRANSITION (ZMBRO3.ODI): From over ZMBRO INT via ODI R-301 to ODI VORTAC.

NOTE: RADAR Required

NOTE: Chart not to scale.

ZMBRO THREE DEPARTURE
(ZMBRO3.ZMBRO) 10042

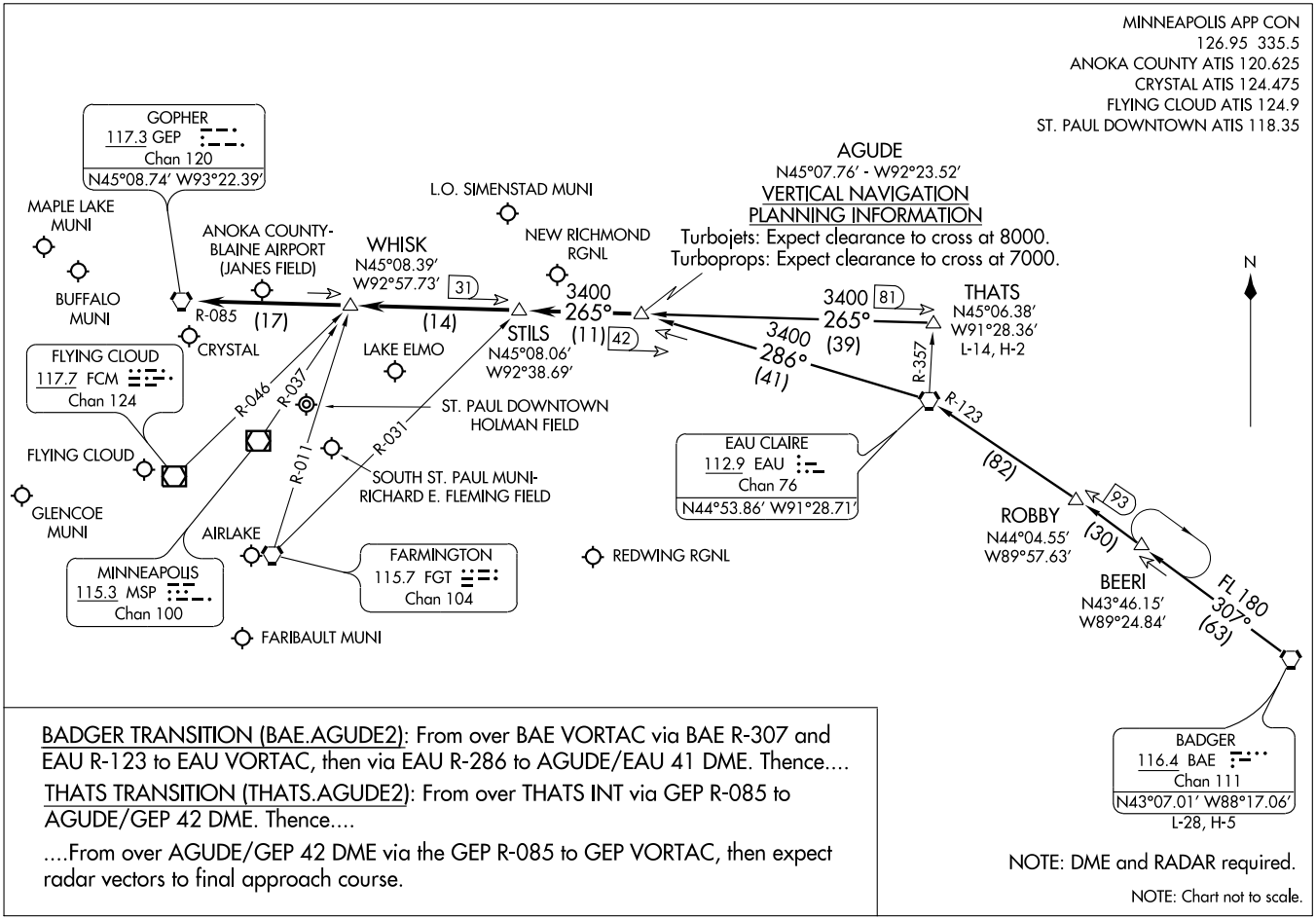
SL-5094 (FAA)

MINNEAPOLIS/ FLYING CLOUD (FCM)
MINNEAPOLIS, MINNESOTA

AGUDE TWO ARRIVAL

(AGUDE.AGUDE2) 10154

MINNEAPOLIS-ST. PAUL, MINNESOTA



BADGER TRANSITION (BAE.AGUDE2): From over BAE VORTAC via BAE R-307 and EAU R-123 to EAU VORTAC, then via EAU R-286 to AGUDE/EAU 41 DME. Thence....

THATS TRANSITION (THATS.AGUDE2): From over THATS INT via GEP R-085 to AGUDE/GEP 42 DME. Thence....

....From over AGUDE/GEP 42 DME via the GEP R-085 to GEP VORTAC, then expect radar vectors to final approach course.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

(AGUDE.AGUDE2) 10154

AGUDE TWO ARRIVAL

ST-263 (FAA)

MINNEAPOLIS-ST. PAUL, MINNESOTA

MINNEAPOLIS

AIRLAKE (LVN) 2 SE UTC−6(−5DT) N44°37.67′ W93°13.69′

TWIN CITIES
L–12J, 14I, A
IAP

960 B S4 **FUEL** 100LL, JET A OX 4 TPA—1760(800) NOTAM FILE LVN

RWY 12–30: H4098X75 (ASPH) S–30, D–80, 2S–102 HIRL

RWY 12: REIL. VASI(V4L)—GA 3.25° TCH 37′. Tree. Rgt tfc.

RWY 30: MALSR. PAPI(P4R)—GA 3.0° TCH 29′. Thld dsplcd 392′. Hill.

AIRPORT REMARKS: Attended Mon–Sat 1300–2300Z‡, Sun 1400–2200Z‡. Maintenance supervisor telephone 612–469–4040 Mon–Fri 1400–2230Z‡. Self service fuel avbl 24 hrs with credit card. Birds on and invof arpt. Hangers 400′ N from centerline in primary surface. Ultralight ops not permitted. ACTIVATE HIRL Rwy 12–30, REIL and VASI Rwy 12, MALSR Rwy 30 and PAPI Rwy 30—CTAF.

WEATHER DATA SOURCES: AWOS–3 118.0 (952) 469–5850.

COMMUNICATIONS: CTAF/UNICOM 123.0

FARMINGTON RCO 122.1R 115.7T (PRINCETON RADIO)

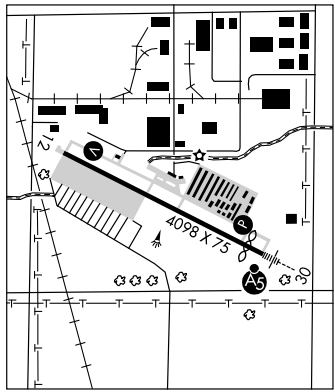
Ⓡ **MINNEAPOLIS APP/DEP CON** 134.7

MINNEAPOLIS CLNC DEL 118.95

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

FARMINGTON (H) VORTAC 115.7 FGT Chan 104 N44°37.86′ W93°10.92′ 259° 2 NM to fld. 972/6E.

ILS 108.9 I–LVN Rwy 30. Unmonitored.



ANOKA CO–BLAINE (JANES FLD) (ANE) 10 N UTC−6(−5DT) N45°08.69′ W93°12.61′

TWIN CITIES
H–2J, L–12J, 14I, A
IAP, AD

912 B S4 **FUEL** 100LL, JET A TPA—1912(1000) NOTAM FILE ANE

RWY 09–27: H5000X100 (ASPH) S–23, D–60 HIRL

RWY 09: REIL. PAPI(P4L)—GA 3.0° TCH 25′. Tree.

RWY 27: MALSR. PAPI(P4L)—GA 3.0° TCH 50′. Trees.

RWY 18–36: H4855X100 (ASPH) S–23, D–60 MIRL

RWY 18: REIL. VASI(V4L)—GA 3.0° TCH 50′. Tree.

RWY 36: REIL. VASI(V4L)—GA 3.0° TCH 50′.

AIRPORT REMARKS: Attended 1300–0400Z‡. Deer and waterfowl on and invof arpt. Rwy 09–27 trees +20′ north side in primary surface. Noise abatement procedures in effect. Ctc arpt manager for details at 612–725–6327. ACTIVATE HIRL Rwy 09–27, MIRL Rwy 18–36, REIL Rwy 09, Rwy 18, and Rwy 36, VASI Rwy 18 and Rwy 36 PAPI Rwy 09 and Rwy 27 and MALSR Rwy 27—CTAF.

WEATHER DATA SOURCES: AWOS–3 120.625 (763) 780–9025. LAWRS.

COMMUNICATIONS: CTAF 132.4 **ATIS** 120.625 **UNICOM** 122.95

RCO 122.55 (PRINCETON RADIO)

Ⓡ **MINNEAPOLIS APP/DEP CON** 126.5

MINNEAPOLIS CLNC DEL 121.85

TOWER 132.4 (Oct–Apr 1300–0300Z‡, May–Sep 1300–0400Z‡)

GND CON 121.85 **CLNC DEL** 121.3

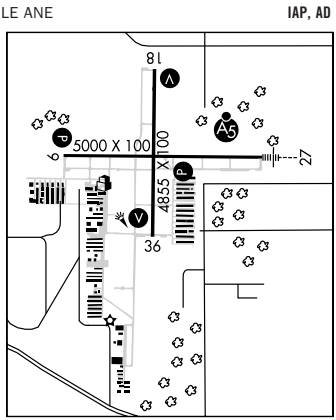
AIRSPACE: CLASS D svc Oct–Apr 1300–0300Z‡, May–Sep 1300–0400Z‡, other times CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

GOPHER (H) VORTACW 117.3 GEP Chan 120 N45°08.74′ W93°22.39′ 084° 6.9 NM to fld. 877/6E. HIWAS.

ILS/DME 111.15 I–ANE Chan 48(Y) Rwy 27.

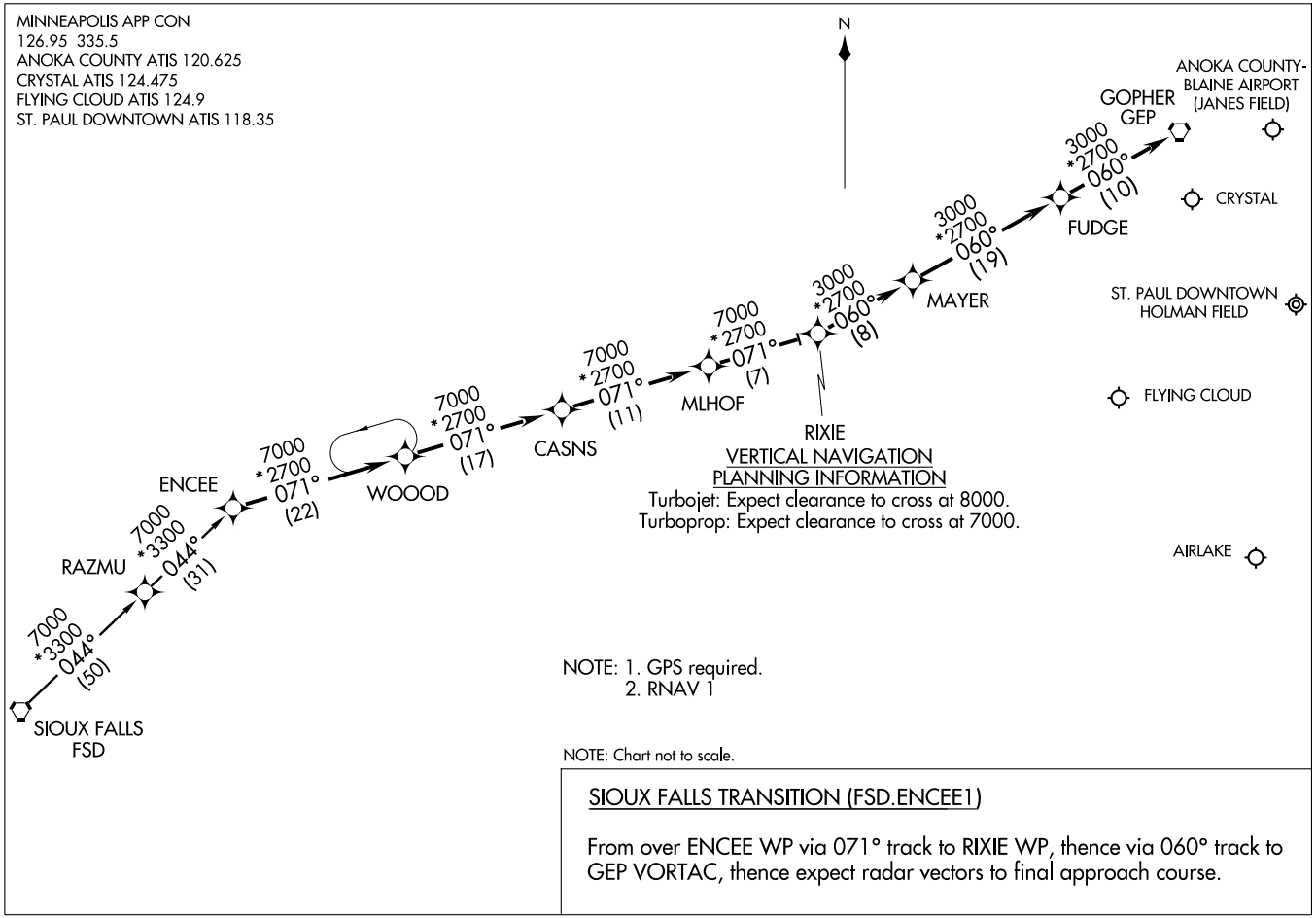
COMM/NAV/WEATHER REMARKS: Minneapolis apch provides CLNC DEL on 121.85 when Anoka Co–Blaine twr clsd.



ENCEE ONE ARRIVAL (RNAV)

(ENCEE.ENCEE1) 07242

MINNEAPOLIS-ST. PAUL, MINNESOTA



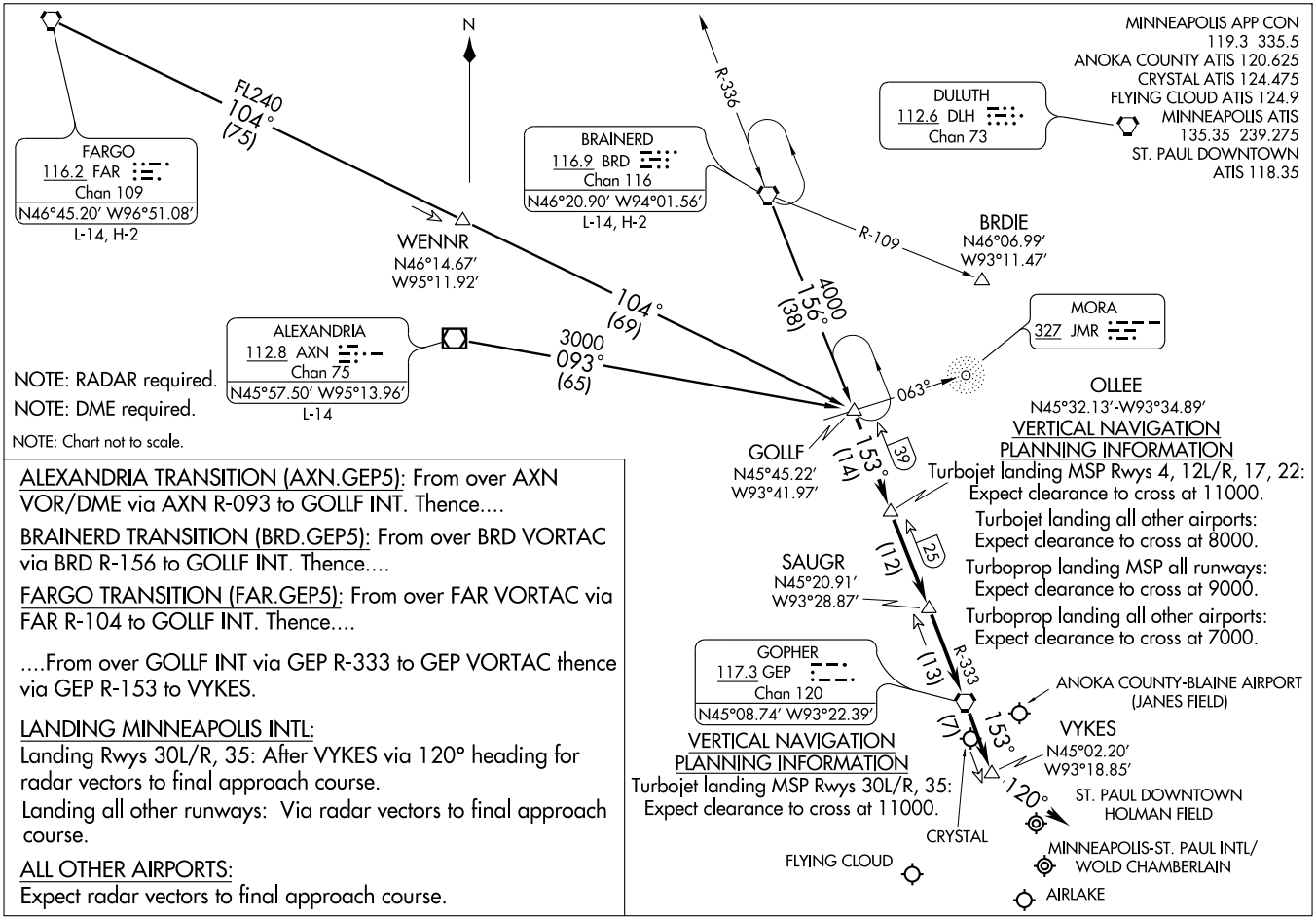
SIOUX FALLS TRANSITION (FSD.ENCEE1)

From over ENCEE WP via 071° track to RIXIE WP, thence via 060° track to GEP VORTAC, thence expect radar vectors to final approach course.

ENCEE ONE ARRIVAL (RNAV)
(ENCEE.ENCEE1) 07242
ST-263 (FAA)
MINNEAPOLIS-ST. PAUL, MINNESOTA

GOPHER FIVE ARRIVAL

(GEP.GEP5) 08157



NOTE: RADAR required.

NOTE: DME required.

NOTE: Chart not to scale.

ALEXANDRIA TRANSITION (AXN.GEP5): From over AXN VOR/DME via AXN R-093 to GOLLF INT. Thence....

BRAINERD TRANSITION (BRD.GEP5): From over BRD VORTAC via BRD R-156 to GOLLF INT. Thence....

FARGO TRANSITION (FAR.GEP5): From over FAR VORTAC via FAR R-104 to GOLLF INT. Thence....

....From over GOLLF INT via GEP R-333 to GEP VORTAC thence via GEP R-153 to VYKES.

LANDING MINNEAPOLIS INTL:

Landing Rwys 30L/R, 35: After VYKES via 120° heading for radar vectors to final approach course.

Landing all other runways: Via radar vectors to final approach course.

ALL OTHER AIRPORTS:

Expect radar vectors to final approach course.

GOPHER FIVE ARRIVAL

(GEP.GEP5) 08157

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA

MINNEAPOLIS, MINNESOTA

LOC I-LVN	APP CRS	Rwy Idg	3706
108.9	294°	TDZE	958
		Apt Elev	960

ILS or LOC RWY 30

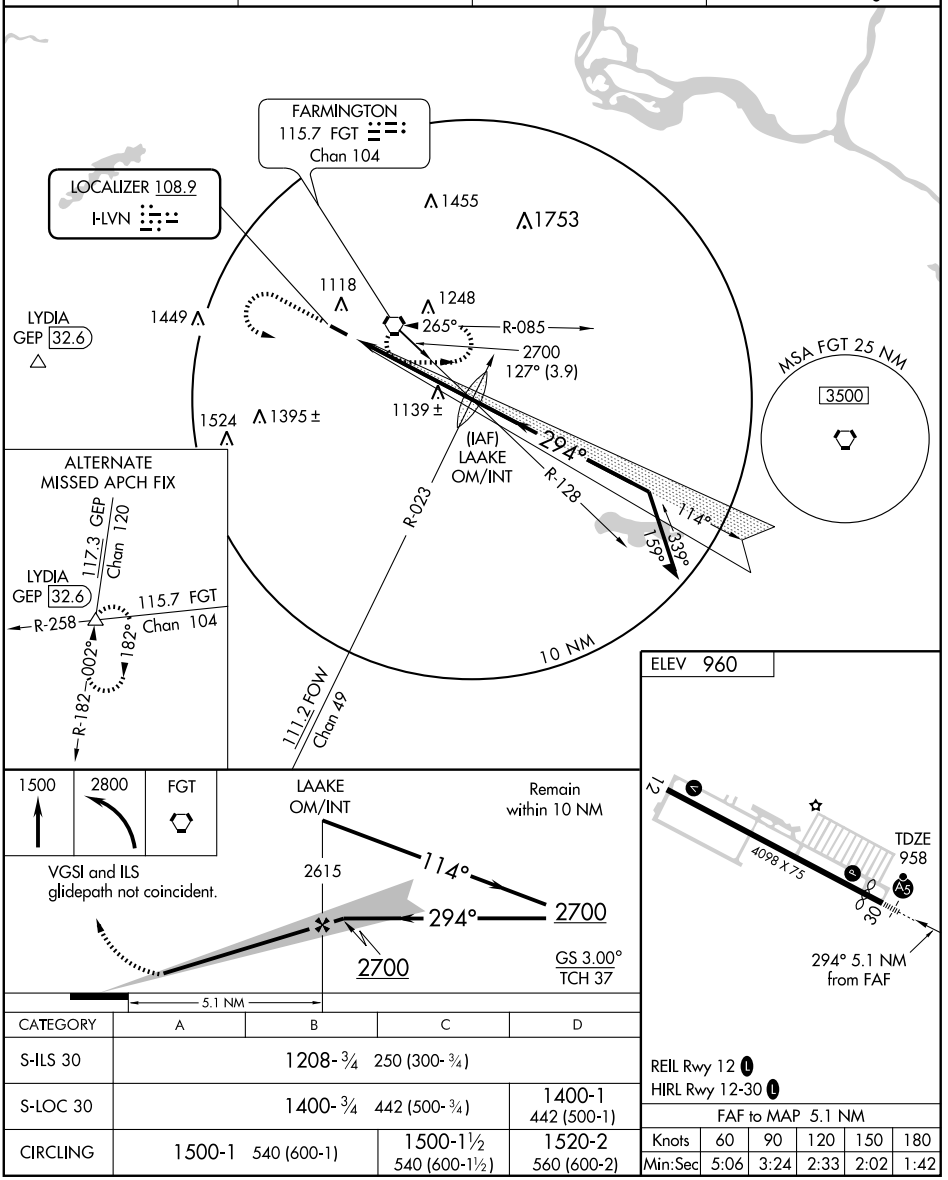
MINNEAPOLIS/AIRLAKE (LVN)

T NA Visibility reduction by helicopters NA. For inoperative MALSR, increase S-LOC Cats A and B visibility to 1.

MALSR

MISSED APPROACH: Climb to 1500 then climbing left turn to 2800 direct FGT VORTAC and hold.

AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
118.0	134.7 284.7	118.95	123.0 (CTAF) L



CATEGORY	A	B	C	D
S-ILS 30	1208-¾ 250 (300-¾)			
S-LOC 30	1400-¾ 442 (500-¾)			1400-1 442 (500-1)
CIRCLING	1500-1 540 (600-1)		1500-1½ 540 (600-1½)	1520-2 560 (600-2)

REIL Rwy 12 L
HIRL Rwy 12-30 L

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	4098
CH 57920	114°	TDZE	960
W12A		Apt Elev	960

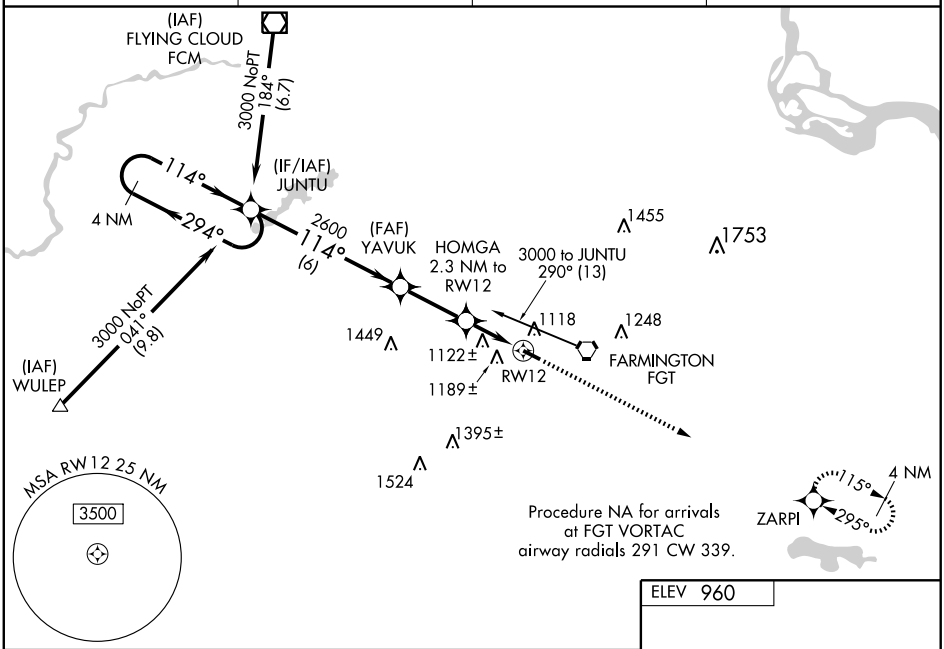
RNAV (GPS) RWY 12

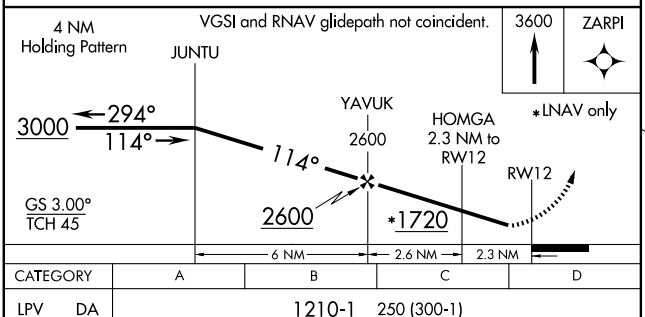
MINNEAPOLIS/AIRLAKE (LVN)

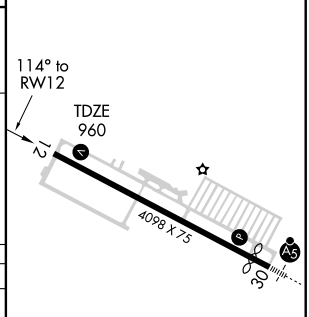
▼ When VGSI inoperative, procedure NA at night. Baro-VNAV NA when using Minneapolis-St Paul Intl/Wold-Chamberlain altimeter setting. For uncompensated Baro-VNAV systems, ▲ LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Minneapolis-St Paul Intl/Wold-Chamberlain altimeter setting and increase all DA 52 feet and all MDA 60 feet. Increase LNAV/VNAV all Cats and LNAV Cat D visibility ¼ mile. VDP NA with Minneapolis-St Paul Intl/Wold-Chamberlain altimeter setting.

MISSED APPROACH: Climb to 3600 direct ZARPI and hold.

AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
118.0	134.7 284.7	118.95	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1210-1 250 (300-1)			
LNAV/VNAV DA	1457-1¾ 497 (500-1¾)			
LNAV MDA	1380-1 420 (500-1)		1380-1¼ 420 (500-1¼)	
CIRCLING	1500-1 540 (600-1)		1500-1½ 540 (600-1½)	1520-2 560 (600-2)

REIL Rwy 12 L
HIRL Rwy 12-30 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

TWOLF TWO ARRIVAL

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA

NC-1, 21 OCT 2010 to 18 NOV 2010

MINNEAPOLIS APP CON
126.95 335.5
118.72 (MSP RWY 35)
MINNEAPOLIS ATIS
135.35 239.275
ANOKA COUNTY ATIS 120.625
CRYSTAL ATIS 124.475
FLYING CLOUD ATIS 124.9
ST. PAUL DOWNTOWN ATIS
118.35

L.O. SIMENSTAD MUNI

ANOKA COUNTY-BLAINE AIRPORT
(JANES FIELD)

NEW RICHMOND RGNL

GOPHER
117.3 GEP
Chan 120

CRYSTAL

ST. PAUL DOWNTOWN HOLMAN FIELD

FLYING CLOUD

300°

MINNEAPOLIS-ST. PAUL INTL/
WOLD CHAMBERLAIN

FLYING CLOUD
117.7 FCM
Chan 124
N44°49.54′-W93°27.41′

R-180

R-178

R-103

SLIKK
N44°47.90′
W93°17.21′

330°
(11)

AIRLAKE

FARMINGTON
115.7 FGT
Chan 104
N44°37.86′-W93°10.92′

TRGET
N44°13.88′-W93°27.73′

VERTICAL NAVIGATION
PLANNING INFORMATION

MSP: Expect clearance to cross at 11000.
All other airports:
Turbojets: Expect clearance to cross at 8000.
Turboprops: Expect clearance to cross at 7000.

5000
(36)
360°

(8)

R-201

GDNEE
N44°30.68′
W93°15.98′

17

(9)

55

PIKKL
N44°22.82′
W93°21.49′

021°
5000
(10)

R-081

6000

62

(7)

MANKATO
110.8 MKT
Chan 45

LYNKS
N44°06.89′
W93°28.39′

8000
(22)

84

KGEEE
N43°44.94′
W93°30.47′

12000
358°
(28)

112

TWOLF
N43°17.00′
W93°33.09′

FORT DODGE
113.5 FOD
Chan 82
N42°36.67′-W94°17.69′
L-12, H-5

12000
032°
(30)

52

R-178
GEP

NOTE: DME and RADAR Required.

12000
*2900
032°
(22)

TICKT
N42°53.71′
W93°59.01′

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

TWOLF TWO ARRIVAL

MINNEAPOLIS, MINNESOTA

(TWOLF.TWOLF2) 10154

ARRIVAL DESCRIPTION

FORT DODGE TRANSITION (FOD.TWOLF2): From over FOD VORTAC via FOD R-032 to TWOLF/FOD 52 DME, Thence . . . .

....From over TWOLF/GEP 112 DME via GEP R-178 to KGEEE/GEP 84 DME, then as depicted to TRGET INT/GEP 55 DME. Thence....

LANDING MSP RWYS 12L/R: From over TRGET INT via FGT R-201 to FGT VORTAC, then via FGT R-330 to SLIKK INT/FGT 11 DME, then via heading 300° for radar vectors to final approach course.

LANDING MSP RWYS 30L/R, 4, 22, 17, 35: From over TRGET INT via FGT R-201 to FGT VORTAC, then via radar vectors to final approach course.

LANDING ALL OTHER AIRPORTS: From over TRGET INT via FCM R-180 to FCM VOR/DME, then expect radar vectors to final approach course.

NC-1, 21 OCT 2010 to 18 NOV 2010

VORTAC FGT	APP CRS	Rwy Idg	4098
115.7	085°	TDZE	960
Chan 104		Apt Elev	960

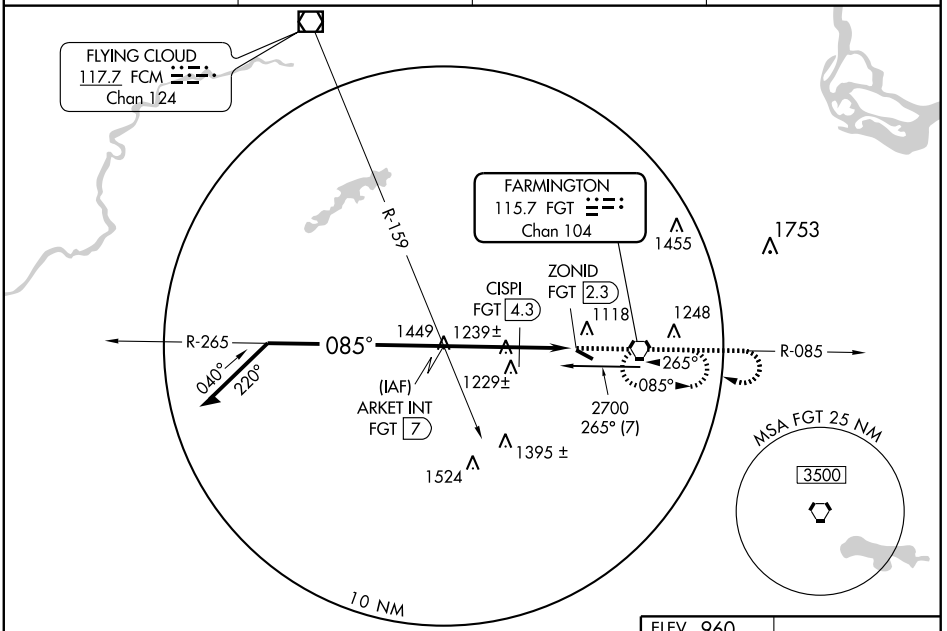
VOR RWY 12

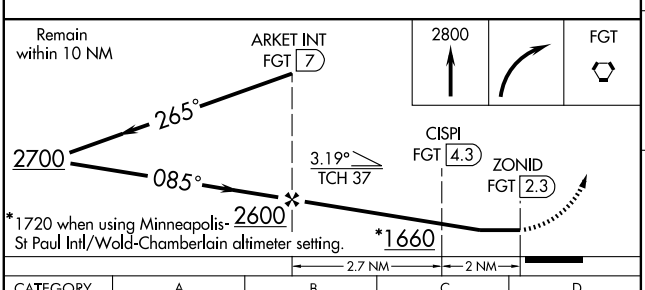
MINNEAPOLIS/AIRLAKE (LVN)

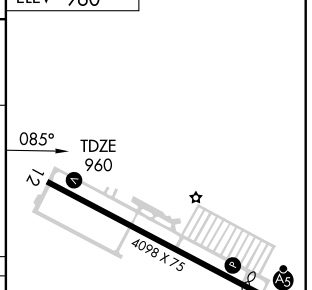
▼ When VGSI inoperative, straight-in/Circling Rwy 12 procedure NA at night. Visibility reduction by helicopters NA. When local altimeter setting not received, use Minneapolis-St Paul Intl/ Wold-Chamberlain altimeter setting and increase all MDA 60 feet, increase S-12 and Circling Cat B, C, and D visibility ¼ mile.

MISSED APPROACH: Climb to 2800 then right turn direct FGT VORTAC and hold.

AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
118.0	134.7 284.7	118.95	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-12	1660-1	700 (700-1)	1660-2 700 (700-2)	1660-2¼ 700 (700-2¼)
CIRCLING	1660-1	700 (700-1)	1660-2 700 (700-2)	1660-2¼ 700 (700-2¼)
CISPI FIX MINIMUMS				
S-12	1480-1	520 (600-1)	1480-1½ 520 (600-1½)	1480-1¾ 520 (600-1¾)
CIRCLING	1500-1	540 (600-1)	1500-1½ 540 (600-1½)	1520-2 560 (600-2)

REIL Rwy 12 L
HIRL Rwy 12-30 L

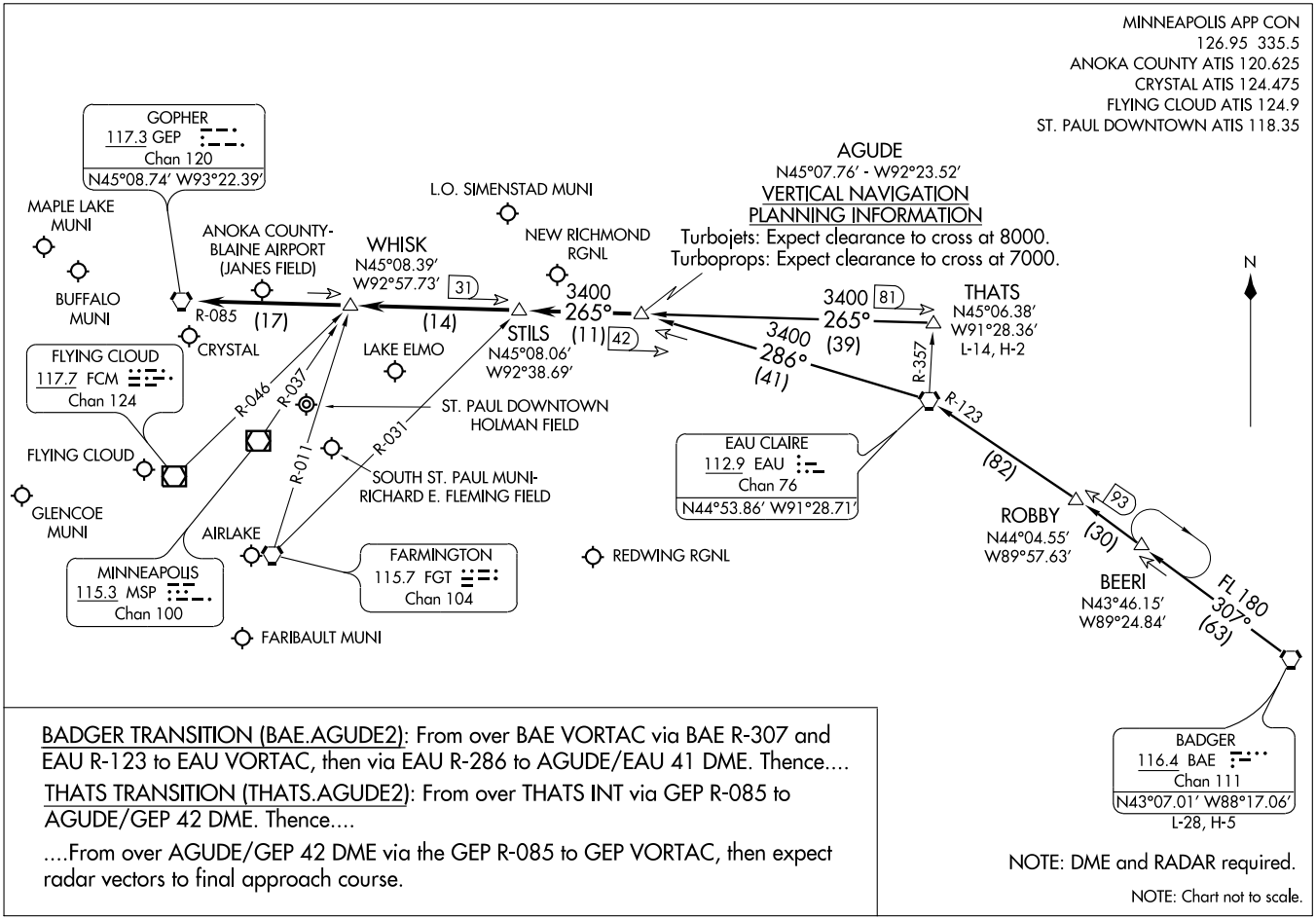
FAF to MAP 4.7 NM					
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

AGUDE TWO ARRIVAL

(AGUDE.AGUDE2) 10154

MINNEAPOLIS-ST. PAUL, MINNESOTA



BADGER TRANSITION (BAE.AGUDE2): From over BAE VORTAC via BAE R-307 and EAU R-123 to EAU VORTAC, then via EAU R-286 to AGUDE/EAU 41 DME. Thence....

THATS TRANSITION (THATS.AGUDE2): From over THATS INT via GEP R-085 to AGUDE/GEP 42 DME. Thence....

....From over AGUDE/GEP 42 DME via the GEP R-085 to GEP VORTAC, then expect radar vectors to final approach course.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

(AGUDE.AGUDE2) 10154

AGUDE TWO ARRIVAL

ST-263 (FAA)

MINNEAPOLIS-ST. PAUL, MINNESOTA

AIRPORT DIAGRAM

AL-5158 (FAA)

MINNEAPOLIS/CRYSTAL (MIC)
MINNEAPOLIS, MINNESOTA

NC-1, 21 OCT 2010 to 18 NOV 2010

ATIS
124.475
CRYSTAL TOWER ★
120.7
GND CON
121.6
CLNC DEL
121.6 (When Tower Closed)

VAR 0.9° E

JANUARY 2010
ANNUAL RATE OF CHANGE
0.1° W

45°04.0'N

45°03.5'N

500 X 75

ELEV 867

HS 6

ELEV 868

HS 5

ELEV 868

HS 8

FIELD ELEV 869

2499 X 75

2122 X 150

3263 X 75

3266 X 75

HS 3

HS 2

HS 1

HS 4

HS 7

TWR

ELEV 869

CIVIL AIR PATROL

140.5°

232.3°

232.4°

052.3°

052.4°

320.5°

RWY 06L-24R
S-12.5, D-25
RWY 14L-32R
S-13, D-25
RWY 14R-32L
S-13, D-25

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

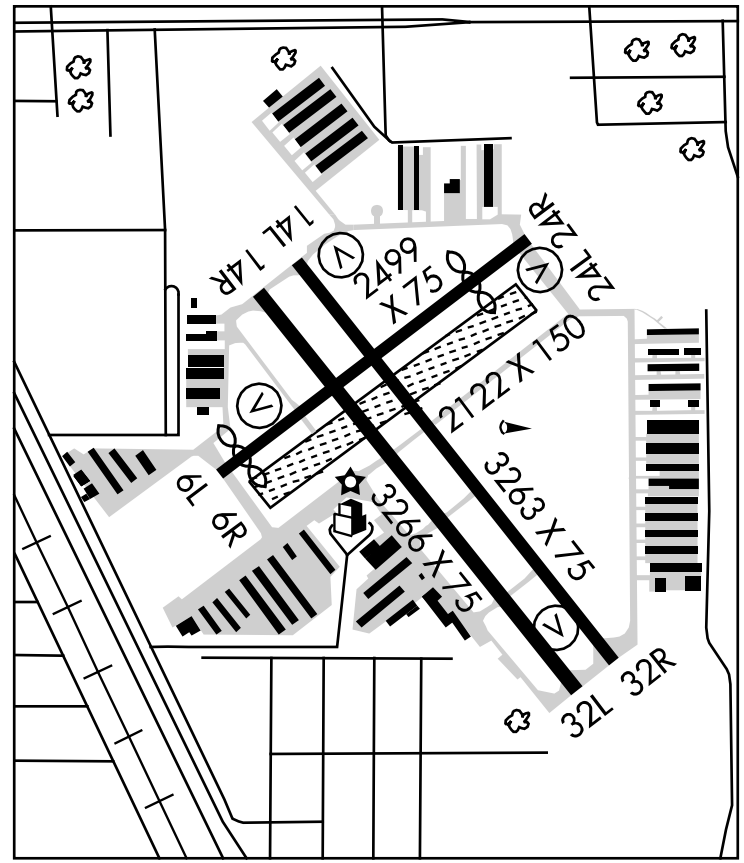
1011

93°21.5'W

93°21.0'W

CRYSTAL (MIC) 8 NW UTC−6(−5DT) N45°03.72′ W93°21.24′ **TWIN CITIES**
869 B S4 **FUEL** 100LL, JET A, MOGAS TPA–1869(1000) NOTAM FILE MIC **L–12J, 14I, A**
IAP, AD

RWY 14R–32L: H3266X75 (ASPH) S–13, D–25
RWY 14R: Tree. **RWY 32L:** Tree.
RWY 14L–32R: H3263X75 (ASPH) S–13, D–25 MIRL
RWY 14L: REIL. VASI(V4L)—GA 4.0° TCH 27′. Tree.
RWY 32R: REIL. VASI(V4L)—GA 3.5° TCH 34′. Trees.
RWY 06L–24R: H2499X75 (ASPH) S–12.5, D–25 MIRL
RWY 06L: VASI(V4L)—GA 4.0° TCH 27′. Thld dsplcd 390′. Tree.
RWY 24R: VASI(V4L)—GA 3.5° TCH 29′. Thld dsplcd 389′. Tree.
RWY 06R–24L: 2122X150 (TURF)
RWY 06R: Tree. **RWY 24L:** Tree.

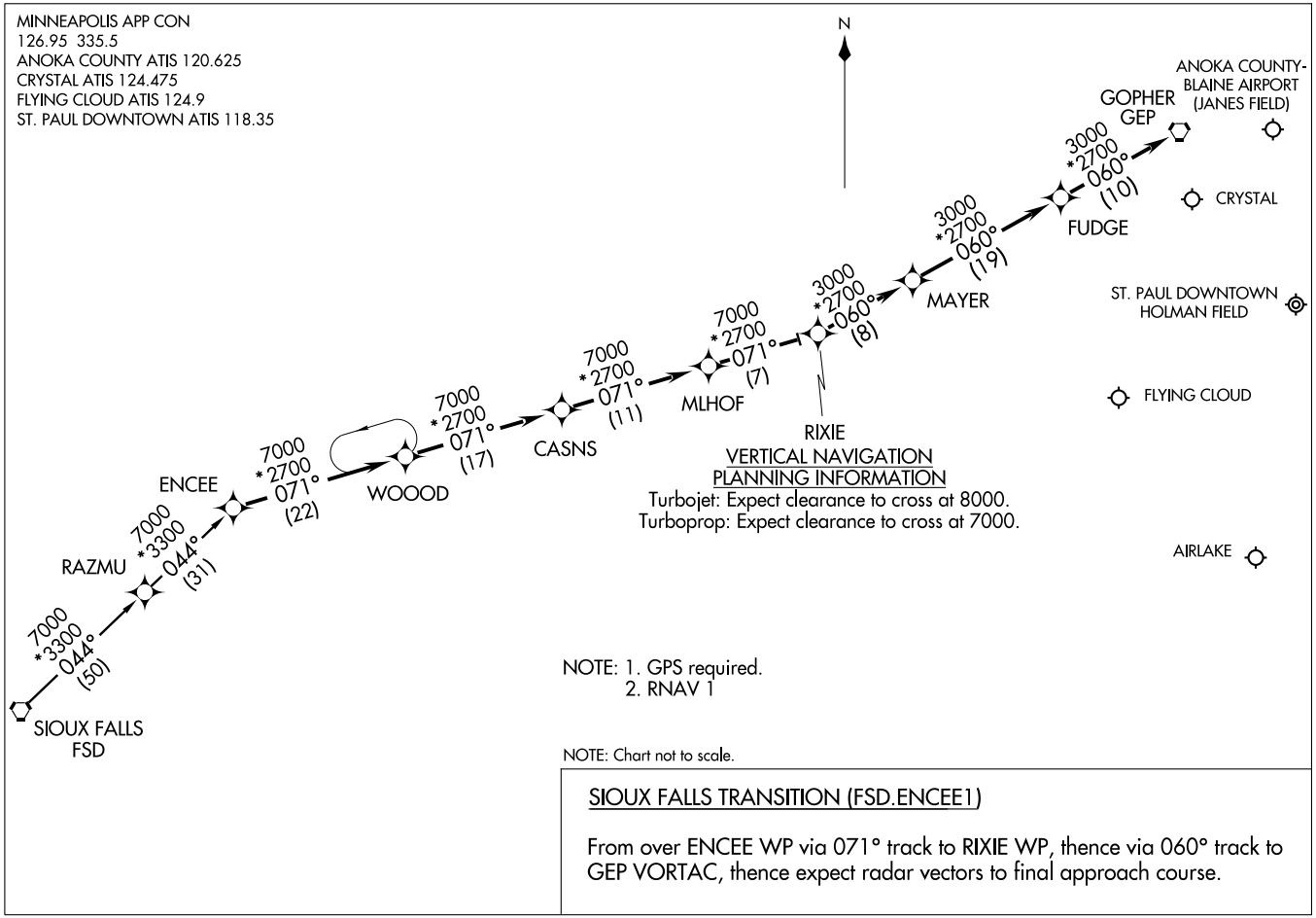


AIRPORT REMARKS: Attended Mon–Fri 1300–0300Z‡, Sat–Sun 1300–0100Z‡. Fuel avbl 24 hrs with credit card. Rwy 14R–32L CLOSED to fixed wing acft 1/2 hour after sunset to ½ hour prior to sunrise. When taxiing invof Rwy 32L runup pad, visibility from twr obscured by building. Deer and waterfowl on and invof arpt. Ultralight ops prohibited. Rwy 06R–24L marked with yellow cones. Rwy 06R–24L turf rwy rough condition. CLOSED Nov–Apr. When ATCT clsd snow removal operators monitor 120.7. Rwy 14L–32R 500′ overrun added to each end. Not avbl for tkfs. When twr closed ACTIVATE MIRL Rwy 14L–32R and Rwy 06L–24R, REIL Rwy 14L and Rwy 32R—CTAF.
WEATHER DATA SOURCES: ASOS (763) 531–2343.
COMMUNICATIONS: CTAF 120.7 **ATIS** 124.475 **UNICOM** 122.95
MINNEAPOLIS APP/DEP CON 126.5
TOWER 120.7 (Oct 1–Apr 30 1300–0300Z‡, May 1–Sep 30 1300–0400Z‡) **GND CON** 121.6
CLNC DEL 121.6 (24 hours)
AIRSPACE: CLASS D svc Oct 1–Apr 30 1300–0300Z‡, May 1–Sep 30 1300–0400Z‡ other times CLASS E.
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
GOPHER (H) VORTACW 117.3 GEP Chan 120 N45°08.74′ W93°22.39′ 165° 5.1 NM to fld. 877/6E.
HIWAS.
COMM/NAV/WEATHER REMARKS: Emerg frequency 121.5 not available at tower.

ENCEE ONE ARRIVAL (RNAV)

(ENCEE.ENCEE1) 07242

MINNEAPOLIS-ST. PAUL, MINNESOTA



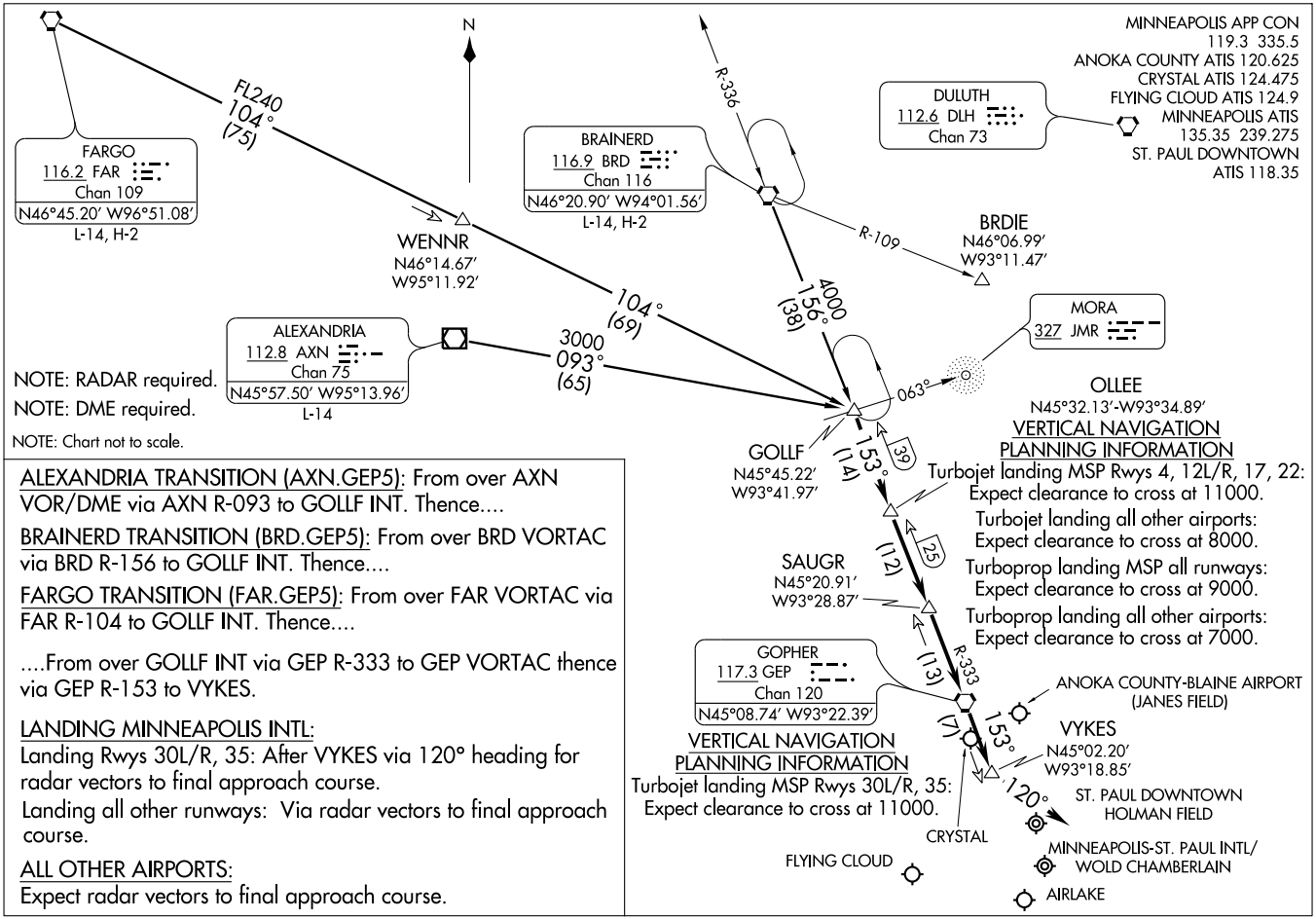
SIOUX FALLS TRANSITION (FSD.ENCEE1)

From over ENCEE WP via 071° track to RIXIE WP, thence via 060° track to GEP VORTAC, thence expect radar vectors to final approach course.

ENCEE ONE ARRIVAL (RNAV)
(ENCEE.ENCEE1) 07242
ST-263 (FAA)
MINNEAPOLIS-ST. PAUL, MINNESOTA

GOPHER FIVE ARRIVAL

(GEP.GEP5) 08157



NOTE: RADAR required.

NOTE: DME required.

NOTE: Chart not to scale.

ALEXANDRIA TRANSITION (AXN.GEP5): From over AXN VOR/DME via AXN R-093 to GOLLF INT. Thence....

BRAINERD TRANSITION (BRD.GEP5): From over BRD VORTAC via BRD R-156 to GOLLF INT. Thence....

FARGO TRANSITION (FAR.GEP5): From over FAR VORTAC via FAR R-104 to GOLLF INT. Thence....

....From over GOLLF INT via GEP R-333 to GEP VORTAC thence via GEP R-153 to VYKES.

LANDING MINNEAPOLIS INTL:

Landing Rwys 30L/R, 35: After VYKES via 120° heading for radar vectors to final approach course.

Landing all other runways: Via radar vectors to final approach course.

ALL OTHER AIRPORTS:

Expect radar vectors to final approach course.

GOPHER FIVE ARRIVAL

(GEP.GEP5) 08157

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA

MINNEAPOLIS, MINNESOTA

HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
DULUTH, MN		
DULUTH INTL (DLH)	HS 1	Rwy 27 apch area.
	HS 2	Apch end of Rwy 27 located at Twy A5.
	HS 3	Rwy 21 via Twy A and Twy C complex int.
GRAND FORKS, ND		
GRAND FORKS INTL (GFK)	HS 1	Rwy 09L and Twy A int.
	HS 2	Rwy 17R and Twy B int.
MINNEAPOLIS, MN		
CRYSTAL (MIC)	HS 1	Short distance between rwys.
	HS 2	Short distance between rwys.
	HS 3	Short distance between rwys.
	HS 4	Int of Rwy 06R (sod) on Twy F.
	HS 5	Int of Rwy 24L (sod) on Twy D.
	HS 6	Multiple vehicle/pedestrian deviations occurrence.
	HS 7	Close proximity of Rwy 14R and Rwy 06R.
	HS 8	Rwy 24R proximity to Twy E and Twy B int.
MINNEAPOLIS, MN		
FLYING CLOUD (FCM)	HS 1	Hold position markings/sign proximity to Twy A.
	HS 2	Hold position markings/sign proximity to Twy A.
	HS 3	Hold position markings/sign proximity to Twy A.
	HS 4	Hold position markings/sign proximity to Twy A.
	HS 5	Hold position markings/sign proximity to Twy A.
	HS 6	Hold position markings/sign proximity to Twy A.
	HS 7	Hold position markings/sign proximity to Twy A.
	HS 8	Hold position markings/sign proximity to Twy A.
	HS 9	Rwy 18 apch area along Twy A.
	HS 10	Proximty of parallel rwys and holding positions.
	HS 11	Short distance between rwy hold short lines.
MINNEAPOLIS, MN		
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN (MSP)	HS 1	Complex int of Twy A, Twy B, Twy C, Twy D, and Twy H in near proximity to Rwy 12R-30L and Rwy 04-22.
	HS 2	Complex twy/rwy geometry.
	HS 3	Complex int of Twy C, Twy D, Twy P, and Twy Q in near proximity to Rwy 12L-30R and Rwy 04-22.
	HS 4	Complex geometry at Rwy 04 apch end.
SIOUX FALLS, SD		
JOE FOSS FIELD (FSD)	HS 1	Complex twy int in close proximity of rwys.

21 OCT 2010 to 18 NOV 2010

21 OCT 2010 to 18 NOV 2010

*See appropriate A/FD, Alaska or Pacific Supplement HOT SPOT table for additional information.

APP CRS	Rwy Idg	3263
139°	TDZE	868
	Apt Elev	869

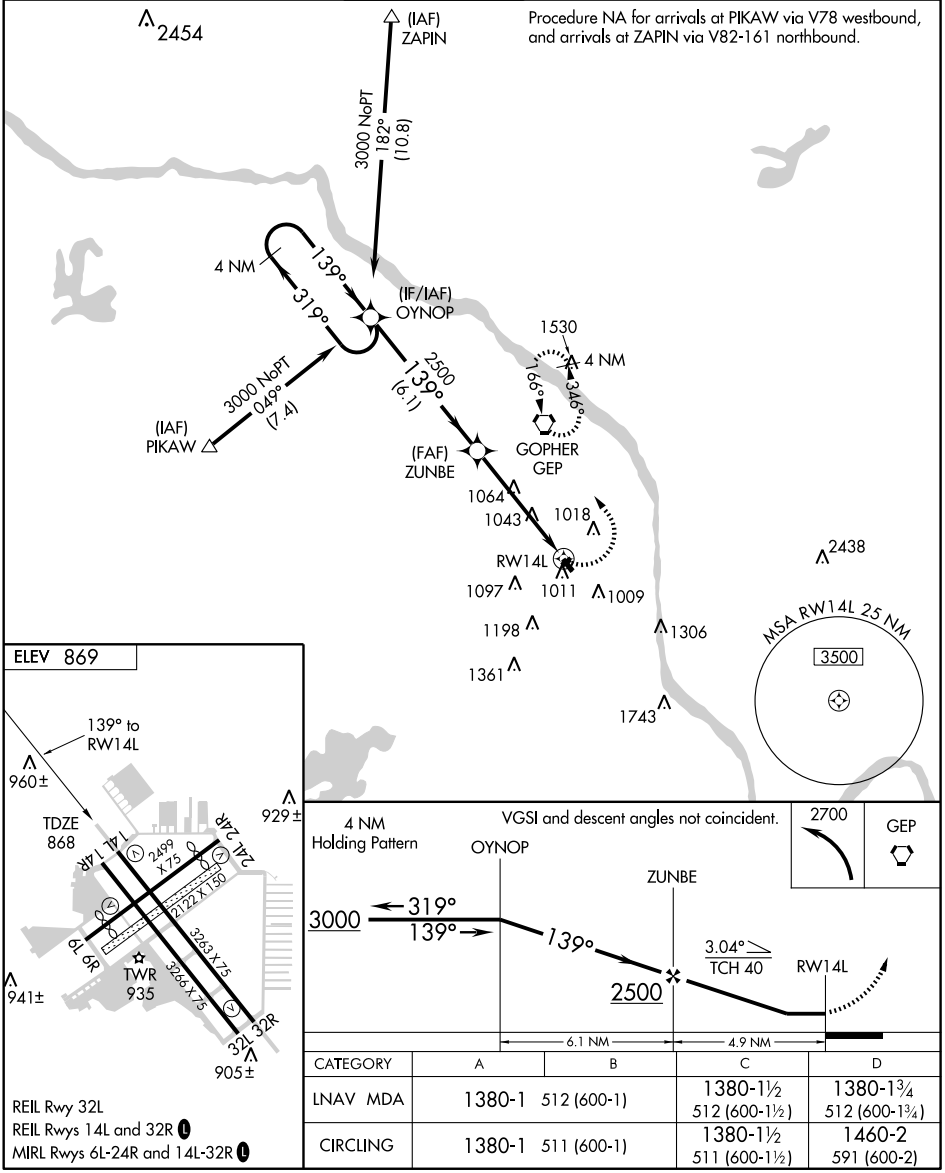
RNAV (GPS) RWY 14L

MINNEAPOLIS/ CRYSTAL (MIC)

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Anoka County-Blaine Airport (Janes Field) altimeter setting and increase all MDA 80 feet, increase circling Cat D visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 2700 direct GEP VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	CRYSTAL TOWER	GND CON	CLNC DEL	UNICOM
124.475	126.5	120.7 (CTAF) L	121.6	121.6	122.95



CATEGORY	A	B	C	D
LNAV MDA	1380-1	512 (600-1)	1380-1½ 512 (600-1½)	1380-1¾ 512 (600-1¾)
CIRCLING	1380-1	511 (600-1)	1380-1½ 511 (600-1½)	1460-2 591 (600-2)

TWOLF TWO ARRIVAL

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA

NC-1, 21 OCT 2010 to 18 NOV 2010

MINNEAPOLIS APP CON
126.95 335.5
118.72 (MSP RWY 35)
MINNEAPOLIS ATIS
135.35 239.275
ANOKA COUNTY ATIS 120.625
CRYSTAL ATIS 124.475
FLYING CLOUD ATIS 124.9
ST. PAUL DOWNTOWN ATIS
118.35

L.O. SIMENSTAD MUNI

ANOKA COUNTY-BLAINE AIRPORT
(JANES FIELD)

NEW RICHMOND RGNL

GOPHER
117.3 GEP
Chan 120

CRYSTAL

ST. PAUL DOWNTOWN HOLMAN FIELD

FLYING CLOUD

300°

MINNEAPOLIS-ST. PAUL INTL/
WOLD CHAMBERLAIN

FLYING CLOUD
117.7 FCM
Chan 124
N44°49.54′-W93°27.41′

R-180

R-178

R-103

SLIKK
N44°47.90′
W93°17.21′

330°
(11)

AIRLAKE

FARMINGTON
115.7 FGT
Chan 104
N44°37.86′-W93°10.92′

TRGET
N44°13.88′-W93°27.73′

VERTICAL NAVIGATION
PLANNING INFORMATION

MSP: Expect clearance to cross at 11000.
All other airports:
Turbojets: Expect clearance to cross at 8000.
Turboprops: Expect clearance to cross at 7000.

5000
(36)
360°

(8)

R-201

GDNEE
N44°30.68′
W93°15.98′

17

(9)

55

PIKKL
N44°22.82′
W93°21.49′

021°
5000
(10)

R-081

6000

62

(7)

MANKATO
110.8 MKT
Chan 45

LYNKS
N44°06.89′
W93°28.39′

8000
(22)

84

KGEEE
N43°44.94′
W93°30.47′

12000
358°
(28)

112

TWOLF
N43°17.00′
W93°33.09′

FORT DODGE
113.5 FOD
Chan 82
N42°36.67′-W94°17.69′
L-12, H-5

12000
032°
(30)

52

R-178
GEP

NOTE: DME and RADAR Required.

12000
*2900
032°
(22)

TICKT
N42°53.71′
W93°59.01′

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

TWOLF TWO ARRIVAL

MINNEAPOLIS, MINNESOTA

(TWOLF.TWOLF2) 10154

ARRIVAL DESCRIPTION

FORT DODGE TRANSITION (FOD.TWOLF2): From over FOD VORTAC via FOD R-032 to TWOLF/FOD 52 DME, Thence . . . .

....From over TWOLF/GEP 112 DME via GEP R-178 to KGEEE/GEP 84 DME, then as depicted to TRGET INT/GEP 55 DME. Thence....

LANDING MSP RWYS 12L/R: From over TRGET INT via FGT R-201 to FGT VORTAC, then via FGT R-330 to SLIKK INT/FGT 11 DME, then via heading 300° for radar vectors to final approach course.

LANDING MSP RWYS 30L/R, 4, 22, 17, 35: From over TRGET INT via FGT R-201 to FGT VORTAC, then via radar vectors to final approach course.

LANDING ALL OTHER AIRPORTS: From over TRGET INT via FCM R-180 to FCM VOR/DME, then expect radar vectors to final approach course.

NC-1, 21 OCT 2010 to 18 NOV 2010

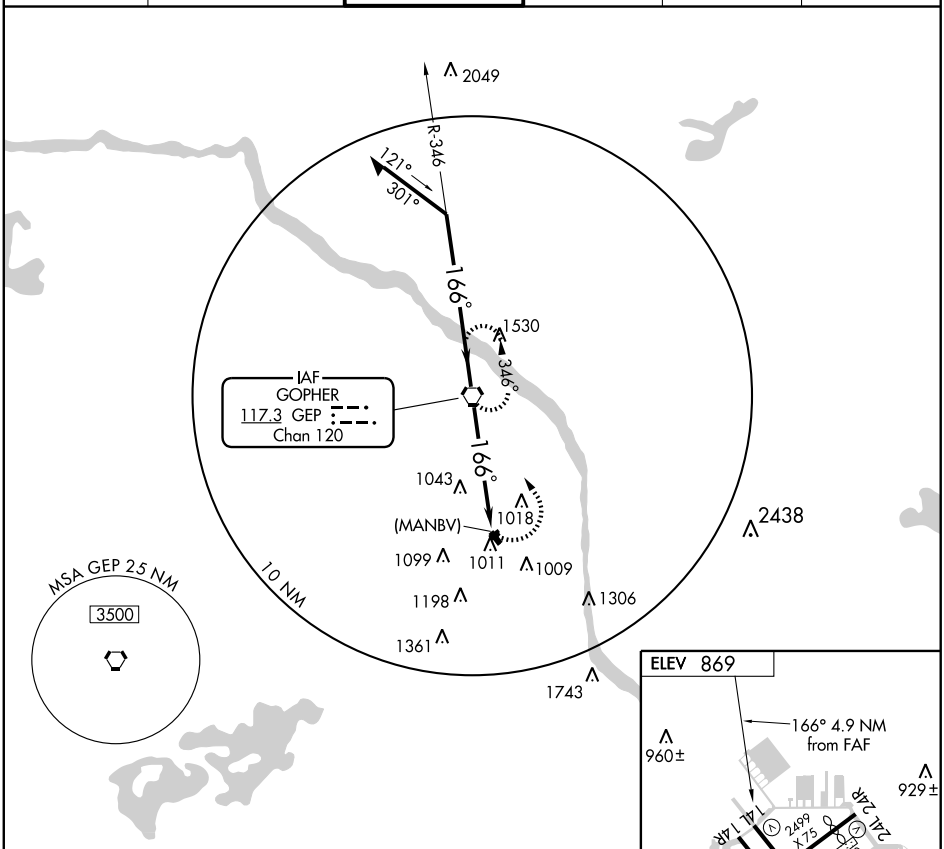
VORTAC GEP 117.3 Chan 120	APP CRS 166°	Rwy Idg N/A TDZE N/A Apt Elev 869

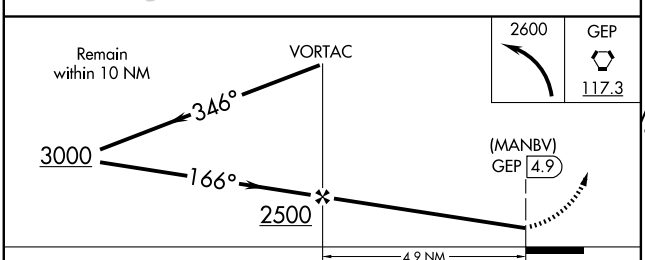
VOR or GPS-A

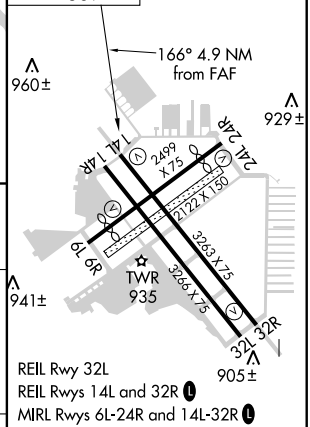
MINNEAPOLIS/ CRYSTAL (MIC)

MISSED APPROACH: Climbing left turn to 2600 direct GEP VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	CRYSTAL TOWER	GND CON	CLNC DEL	UNICOM
124.475	126.5	120.7 (CTAF) L	121.6	121.6	122.95







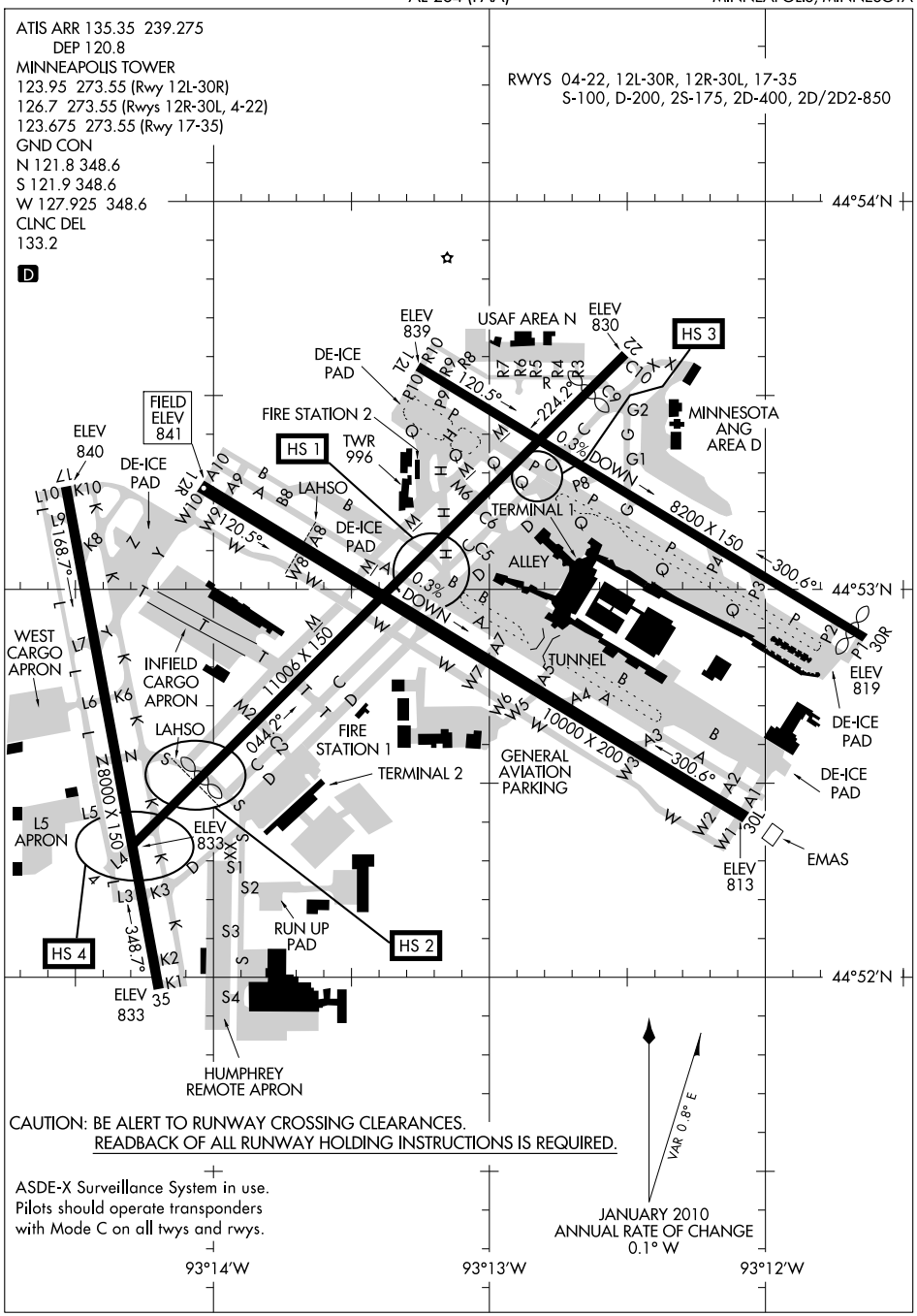
CATEGORY	A	B	C	D
CIRCLING	1360-1 491 (500-1)			1460-2 591 (600-2)

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

AIRPORT DIAGRAM

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
AL-264 (FAA)
MINNEAPOLIS, MINNESOTA



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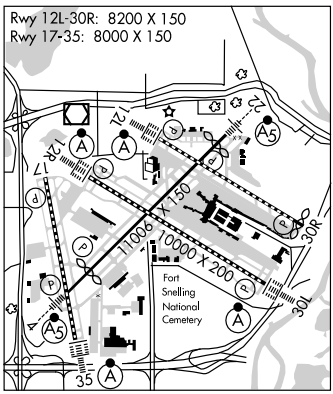
AIRPORT DIAGRAM

MINNEAPOLIS, MINNESOTA
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

10266

MINNEAPOLIS–ST PAUL INTL /WOLD–CHAMBERLAIN (MSP) 6 SW UTC–6(–5DT) **TWIN CITIES**
N44°52.92′ W93°13.31′ **H–2J, L–12J, 14I, A**
841 B S4 **FUEL** 100LL, JET A OX 1, 2, 3, 4 LRA Class I, ARFF Index E NOTAM FILE MSP **IAP, AD**

RWY 04–22: H11006X150 (CONC–GRVD) S–100, D–200, 2S–175, 2D–400, 2D/2D2–850 HIRL
RWY 04: MALSR. PAPI(P4L)—GA 3.0° TCH 75′. Thld dsplcd 1550′. Tree.
RWY 22: MALSR. PAPI(P4L)—GA 3.0° TCH 42′. Thld dsplcd 988′. Tree.
RWY 12R–30L: H10000X200 (CONC–GRVD) S–100, D–200, 2S–175, 2D–400, 2D/2D2–850 HIRL (NSTD) CL
RWY 12R: ALSF2. TDZL. PAPI(P4L)—GA 3.0° TCH 65′. Tree. 0.3% down.
RWY 30L: ALSF2. TDZL. PAPI(P4L)—GA 3.0° TCH 73′. Tree.
RWY 12L–30R: H8200X150 (ASPH–CONC–GRVD) S–100, D–200, 2S–175, 2D–400, 2D/2D2–850 HIRL CL
RWY 12L: ALSF2. TDZL. PAPI(P4L)—GA 3.0° TCH 75′. Tree. 0.3% down.
RWY 30R: REIL. PAPI(P4L)—GA 3.0° TCH 73′. Thld dsplcd 200′. Tree.
RWY 17–35: H8000X150 (CONC–GRVD) S–100, D–200, 2S–175, 2D–400, 2D/2D2–850 HIRL CL
RWY 17: REIL. PAPI(P4R)—GA 3.0° TCH 60′. Tree.
RWY 35: ALSF2. TDZL. PAPI(P4L)—GA 3.0° TCH 71′.



LAND AND HOLD SHORT OPERATIONS

LANDING	HOLD SHORT POINT	DIST AVBL
RWY 22	Twy K	8550
RWY 30L	Twy A9/W9	8150

RUNWAY DECLARED DISTANCE INFORMATION
RWY 12L: TORA–8200 TODA–8200 ASDA–7620 LDA–7620
RWY 30R: TORA–8200 TODA–8200 ASDA–8200 LDA–8000
ARRESTING GEAR/SYSTEM
RWY 12R: EMAS
AIRPORT REMARKS: Attended continuously. Birds on and invof arpt. Training flights prohibited. General aviation flights must terminate at the FBO or US Customs unless approved by Airport Manager. All unscheduled acft at terminal 2–Humphrey are required to ctc terminal 2 gate ctl on 122.95 or call 612–726–5742 prior to arrival. For noise abatement procedures call 612–726–9411. No stage 1 Category Civil acft, nighttime hrs are 0430–1200Z‡. Complex geometry at Rwy 04 approach end. Rwy 04 departures check compass to verify correct rwy heading. ASDE–X surveillance system in use. Pilots should operate transponders with mode C on all twys and rwys. Rwy 04 runway visual range avbl touchdown, rollout. Rwy 22 runway visual range avbl touchdown, rollout. Rwy 12R runway visual range avbl touchdown, midfield, rollout. Rwy 30L runway visual range avbl touchdown, midfield, rollout. Rwy 12L runway visual range avbl touchdown, midfield, rollout. Rwy 30R runway visual range avbl touchdown, midfield, rollout. Rwy 17 runway visual range avbl touchdown, midfield, rollout. Rwy 35 runway visual range avbl touchdown, midfield, rollout. Vehicles parked along south end of Twy S. Ldg fee. Flight Notification Service (ADCUS) avbl. NOTE: See Special Notices—Intersection Departures During Period Of Darkness, Continuous Power Facilities.
WEATHER DATA SOURCES: ASOS (612) 725–0939. LLWAS. TDWR.
COMMUNICATIONS: D–ATIS ARR 135.35 (612) 726–9240 **D–ATIS DEP** 120.8 **UNICOM** 122.95
RCO 122.3 (PRINCETON RADIO)
Ⓡ **APP CON** 119.3 (N or E of arrival rwy and Rwy 17) 126.95 (S or W of arrival rwy and Rwys 04, 12R and 30L) 118.72 (Rwy 35)
TOWER 126.7 (Rwys 12R–30L and 04–22) 123.95 (Rwy 12L–30R) 123.675 (Rwy 17–35)
GND CON 121.9 (S) 121.8 (N) 127.925 (W) **CLNC DEL** 133.2 **GND METERING** 133.57
Ⓡ **DEP CON** 125.75 (N or W of arrival rwy) 124.7 (S or E of arrival rwy) 132.975
AIRSPACE: CLASS B: See VFR Terminal Area Chart.
RADIO AIDS TO NAVIGATION: NOTAM FILE MSP.
(H) VORW/DME 115.3 MSP Chan 100 N44°53.79′ W93°14.19′ 142° 1.1 NM to fld. 831/2E. VOR portion unusable 260°–270° blo 4000′.
ILS/DME 110.7 I–INN Chan 44 Rwy 30R. Class IE.
ILS/DME 110.3 I–MSP Chan 40 Rwy 30L. Class IE.
ILS 109.3 I–APL Rwy 04 LOC only. LOC unusable byd 25° L and R of course.
ILS/DME 110.3 I–HKZ Chan 40 Rwy 12R. Class IIIE. DME unusable byd 25° right of course.
ILS/DME 110.7 I–PJL Chan 44 Rwy 12L. Class IIIE. DME also serves Rwy 30R. DME unusable byd 20° left of course.
ILS/DME 110.95 I–BMA Chan 46(Y) Rwy 35. Class IIIE.
ILS/DME 110.95 I–TJZ Chan 46(Y) Rwy 17. Class I. LOC only.
ILS 110.5 I–SIJ Rwy 22. LOC only.

LOC/DME I-MSP	APP CRS	Rwy Idg 10000
110.3	299°	TDZE 823
Chan 40		Apt Elev 841

CONVERGING ILS RWY 30L

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

T ANA Simultaneous approach authorized with CONVERGING ILS Rwy 35.
RADAR required.
For inoperative ALSF, increase visibility, all Cats to 1¼.

ALSF-2

MISSED APPROACH: Climb to 1300 then climbing right turn to 4000 direct GEP VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	

2438

RADAR REQUIRED

ALTERNATE MISSED APCH FIX
112.1 STC
R-101
Chan 58
101°
281°
PLUGS
STC 22.6
117.3 GEP
R-333
Chan 120

1549 1743 1539 1290 1230 1085± 1040 1158 1006 949 1111 1192 932 1033 1043 1060 1305

LOCALIZER 110.3
I-MSP
Chan 40

MSA FGT 25 NM
3500
090° 270°
2800

MISSED APCH FIX
R-297
297°
117°
GOPHER
GEP
117.3
Chan 120

IM
NARCO INT
I-MSP 6.8
AABEZ INT
I-MSP 9.8
(IF)
PIGZI INT
I-MSP 12.7
PINKE INT
I-MSP 15.6
10 NM
3000 (3)
4000 (3)
5000 (2.9)
6000 (2.9)
299°
119°
R-017
R-032
R-045
R-056
R-065
(IAF)
HASTI INT
I-MSP 18.5

FARMINGTON
115.7 FGT
Chan 104

ELEV 841 D

950± 996 906± 859± 865± 30 TDZE 823 299° 35
8000 X 150
11,000 X 150
0.3% DOWN
10,000 X 200
0.3% DOWN

HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

1300 4000 GEP 117.3

* When authorized by ATC, intercept glidepath at AABEZ, 4000; or PIGZI, 5000; or PINKE, 6000.

VGSI and ILS glidepath not coincident

NARCO INT I-MSP 6.8 — AABEZ INT I-MSP 9.8 — PIGZI INT I-MSP 12.7 — PINKE INT I-MSP 15.6 — HASTI INT I-MSP 18.5

3000 4000* 5000* 6000* 7000 299°

IM 3000

GS 3.00° TCH 54

0.2 6.4 NM 3 NM 3 NM 2.9 NM 2.9 NM

CATEGORY	A	B	C	D	E
S-ILS 30L	1173/40 350 (400-¾)				

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LOC/DME I-INN	APP CRS	Rwy Idg 8000
110.7	300°	TDZE 823
Chan 44		Apt Elev 841

CONVERGING ILS RWY 30R

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

T
NA

Simultaneous approach authorized with CONVERGING ILS Rwy 35.

MISSED APPROACH: Climbing right turn to 4000 via heading 040° and GEP VORTAC R-085 to WHISK INT/GEP 17.5 DME and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	

NC-1, 21 OCT 2010 to 18 NOV 2010

RADAR REQUIRED

LOCALIZER 110.7 I-INN Chan 44

*When assigned by ATC, intercept glidepath at 4000, 5000 or 6000.

MISSED APCH FIX

117.3 GEP R-085 Chan 120

085° 265°

WHISK GEP 17.5

117.7 FCM Chan 124 R-046 R-037 R-011

115.3 MSP Chan 100

115.7 FGT Chan 104

ALTERNATE MISSED APCH FIX

117.3 GEP R-085 Chan 120

011° 191°

WHISK FGT 32

117.7 FCM Chan 124 R-046 R-037 R-011

115.3 MSP Chan 100

115.7 FGT Chan 104

1743 1549 1539 1290 1230 1040 1144 1085± 1006 949 932 1192 1033 1042 1060 1110± 1305

SAMMZ INT I-INN 9.7

(IF)

BONNA INT I-INN 12.7

JACKO INT I-INN 6.7 RADAR

3000 (3)

300°

WULAM INT I-INN 15.6

(IAF)

GROVZ INT I-INN 18.5

*4000 (3)

*5000 (2.9)

*6000 (2.9)

300°

120°

R-018 R-031 R-044 R-055 R-064

10 NM

1753

MSA GEP 25 NM

3500

090°

2700

360°

FARMINGTON 115.7 FGT Chan 104

ELEV 841 D

950± 996 906± 859± 865± 300° TDZE 823

8200 X 150 0.3% DOWN

10,000 X 200 0.3% DOWN

11,006 X 150 0.3% DOWN

8000 X 150

4000 hdg 040°

GEP R-085 117.3

WHISK

* When assigned by ATC, intercept glidepath at 4000, 5000 or 6000.

VGSI and ILS glidepath not coincident

JACKO INT I-INN 6.7 RADAR

SAMMZ INT I-INN 9.7

BONNA INT I-INN 12.7

WULAM INT I-INN 15.6

GROVZ INT I-INN 18.5

3000 4000* 3000 300° 5000* 6000* 7000

GS 3.00° TCH 55

6.6 NM 3 NM 3 NM 2.9 NM 2.9 NM

CATEGORY	A	B	C	D	E
S-ILS 30R	1273-1½ 450 (500-1½)				

HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

LOC/DME I-BMA	APP CRS	Rwy Idg	8000
110.95	349°	TDZE	834
Chan 46 (Y)		Apt Elev	841

CONVERGING ILS RWY 35

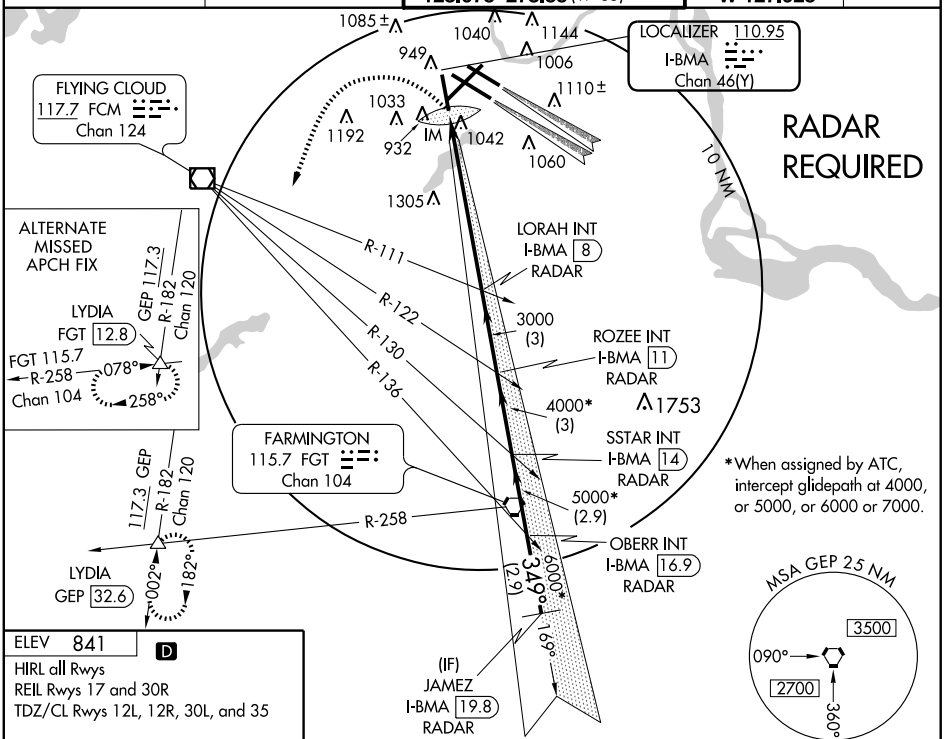
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

T NA — Inoperative table does not apply. No autoland on CONVERGING ILS RWY 35. Simultaneous approach authorized with CONVERGING ILS RWY 30L and CONVERGING ILS RWY 30R.

ALSF-2

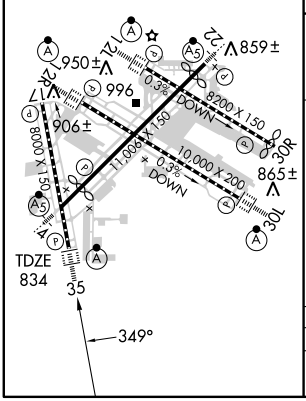
MISSED APPROACH: Climbing left turn to 5000 via heading 240° and GEP R-182 to LYDIA INT/GEP 32.6 DME and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	



ELEV 841 D

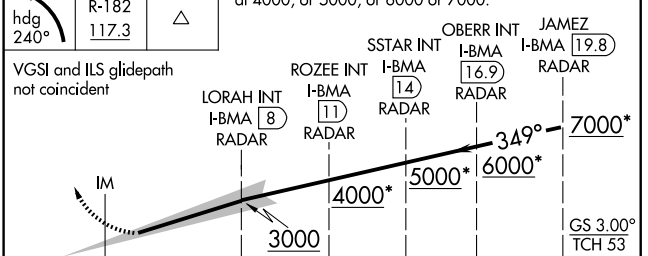
HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35



5000 hdg 240°	GEP R-182 117.3	LYDIA △

* When assigned by ATC, intercept glidepath at 4000, or 5000, or 6000 or 7000.

VGSI and ILS glidepath not coincident



CATEGORY	A	B	C	D
S-ILS 35	1684-3 850 (900-3)			

COULT THREE DEPARTURE

(COULT3.COULT) 10098

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN(MSP)

MINNEAPOLIS, MINNESOTA

COULT THREE DEPARTURE

(COULT3.COULT) 10098

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN(MSP)

MINNEAPOLIS, MINNESOTA

SI-264 (FAA)

ATIS DEP 120.8
CLNC DEL 133.2
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH or EAST 124.7 357.4
NORTH or WEST 125.75 357.4

TAKE-OFF MINIMUMS:
Rwy 4, 12L, 12R, 17, 22: Standard.
Rwy 35: Standard with minimum climb of 219′ per NM to 2100.
Rwy 30L: Standard with minimum climb of 210′ per NM to 2100.
Rwy 30R: Standard with minimum climb of 220′ per NM to 2100.

GOPHER
117.3 GEP
Chan 120

EAU CLAIRE
112.9 EAU
Chan 76

MINNEAPOLIS
115.3 MSP
Chan 100

FLYING CLOUD
117.7 FCM
Chan 124

FARMINGTON
115.7 FGT
Chan 104

DELLS
117.0 DLL
Chan 117
N43°33.05′-W89°45.82′
L-28, H-5

R-119
119°
46
R-251
R-233
R-203
TAXEE
N44°42.15′
W92°29.56′
(15)
61
COULT
N44°33.40′
W92°12.51′
9000
*2600
119°
(19)
80
LMFRY
N44°22.24′
W91°51.03′
9000
*3500
116°
(103)
R-296
MSP 7
MSP 8
R-010
FALLS 1 MOA
R-6901A
R-6901B
N

DME aircraft Rwy 12L/12R
(For assigned 060° CW 100°)
3500

Rwy 17
(For assigned 230° CW 285°)
3500

Non DME Aircraft Rwy 12L/12R
(For assigned 060° CW 100°)
3500

DEPARTURE CROSSING RESTRICTIONS:
Runway 12L/R DME aircraft requires an ATC climb gradient of 546′ per NM to 3500.
Runway 12L/R Non-DME aircraft requires an ATC climb gradient of 594′ per NM to 3500.
Runway 17 requires an ATC climb gradient of 403′ per NM to 3500.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: RADAR required.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Fly assigned heading for radar vectors to intercept GEP R-119 to COULT INT/GEP 61 DME. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude.

DME EQUIPPED AIRCRAFT RWY 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

NON-DME EQUIPPED AIRCRAFT RWY 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAY 17: For assigned heading 230° clockwise to 285° cross MSP 8 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAYS 4, 22, 30L/R, 35: Initially assigned heading. Thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

DELLS TRANSITION (COULT3.DLL): From over COULT INT via GEP R-119 to LMFRY, then via DLL R-296 to DLL VORTAC.

TAKE-OFF OBSTACLE NOTES:

RWY 4: Multiple trees beginning 800′ from DER, 264′ left of centerline, up to 75′ AGL/921′ MSL.
Rod on building 2528′ from DER, 1175′ left of centerline, 78′ AGL/922′ MSL.
Fence 803′ from DER, 585′ left of centerline, 15′ AGL/860′ MSL.
Antenna on OL building 456′ from DER, 319′ left of centerline, 13′ AGL/850′ MSL.
Light poles 1932′ from DER, 718′ left of centerline, 45′ AGL/885′ MSL.
Stack 4535′ from DER, 481′ left of centerline, 139′ AGL/949′ MSL.

RWY 17: Antenna 1272′ from DER, 562 right of centerline, 57′ AGL/891′ MSL.
Pole 409′ from DER, 530′ right of centerline, 29′ AGL/866′ MSL.
Wind direction indicator on building 2619′ from DER, 881′ left of centerline, 97′ AGL/918′ MSL.
Building 2619′ from DER, 859′ left of centerline, 84′ AGL/905′ MSL.
Light 1176′ from DER, 291′ right of centerline, 11′ AGL/875′ MSL.
Tree 2619′ from DER, on centerline, 79′ AGL/900′ MSL.

RWY 22: Tree 2906′ from DER, 833′ right of centerline, 94′ AGL/934′ MSL.
Hopper 1717′ from DER, 456′ left of centerline, 48′ AGL/888′ MSL.

RWY 30L: Multiple trees beginning 1113′ from DER, 701′ left of centerline , up to 80′ AGL/919′ MSL.
Tree 1230′ from DER, 633′ right of centerline, 30′ AGL/877′ MSL.
Ground 28′ from DER, 490′ right of centerline 0′ AGL/844′ MSL.

RWY 30R: Building 1056′ from DER, 198′ left of centerline, 13′ AGL/853′ MSL.
Multiple trees beginning 3010′ from DER, 334′ left of centerline, up to 94′ AGL/940′ MSL.
Light pole 1849′ from DER, 698′ right of centerline, 17′ AGL/871′ MSL.
Fence 1327′ from DER, 667′ right of centerline, 8′ AGL/857′ MSL.
Tree 3703′ from DER, 350′ right of centerline, 67′ AGL/914′ MSL.
Rod on pole 3143′ from DER, 47′ right of centerline, 38′ AGL/898′ MSL.

RWY 35: Tree 175′ from DER, 398′ right of centerline, 73′ AGL/883′ MSL.
Multiple trees beginning 1989′ from DER, 351′ left of centerline, up to 65′ AGL/902′ MSL.
Multiple buildings beginning 5.5 NM from DER, 1787′ left of centerline, up to 811′ AGL/1743′ MSL.

RWY 12R: Multiple trees beginning 1477′ from DER, 407′ left of centerline, up to 86′ AGL/851′ MSL.
Multiple trees beginning 1426′ from DER, 124′ right of centerline, up to 111′ AGL/847′ MSL.
Light pole 1408′ from DER, 746′ right of centerline, 85′ AGL/843′ MSL.
Radar reflector 983′ from DER, 32′ left of centerline, 15′ AGL/829′ MSL.
Pipe on building, 826′ from DER, 576′ left of centerline, 10′ AGL/825′ MSL.
OL on LOC 766′ from DER, on centerline, 7′ AGL/821′ MSL.

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DARWIN THREE DEPARTURE

(DWN3.DWN) 10042

MINNEAPOLIS-ST. PAUL INTL/WOLD-CHAMBERLAIN (MSP)

MINNEAPOLIS, MINNESOTA

DARWIN THREE DEPARTURE

(DWN3.DWN) 10042

MINNEAPOLIS-ST. PAUL INTL/WOLD-CHAMBERLAIN (MSP)

MINNEAPOLIS, MINNESOTA

SL-264 (FAA)

TAKE-OFF MINIMUMS

Rwy 4, 12L, 12R, 17, 22: Standard.
Rwy 30L: Standard with minimum climb of 210′ per NM to 2100.
Rwy 30R: Standard with minimum climb of 220′ per NM to 2100.
Rwy 35: Standard with minimum climb of 219′ per NM to 2100.

ATIS DEP 120.8
CLNC DEL
133.2
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH or EAST 124.7 357.4
NORTH or WEST 125.75 357.4

N

ST. CLOUD
112.1 STC
Chan 58

R-172

DARWIN
109.0 DWN
Chan 27
N45°05.25′-W94°27.23′

R-088

60

10000
*3800
271°
(167)

107

10000
(MRA)

R-095

INUNE
N45°01.01′
W93°59.54′

(20)

281°

33

R-281

MINNEAPOLIS
115.3 MSP
Chan 100

ABERDEEN
113.0 ABR
Chan 77
N45°25.04′-W98°22.12′
L-14, H-2

DME aircraft Rwy 12L/12R
(assigned 060° CW 100°)
3500

MSP 7

MSP 8

R-010

Rwy 17
(assigned 230° CW 285°)
3500

Non DME Aircraft Rwy 12L/12R
(assigned 060° CW 100°)
3500

FARMINGTON
115.7 FGT
Chan 104

DEPARTURE CROSSING RESTRICTIONS:

Runway 12L/R DME aircraft requires an ATC climb gradient of 546′ per NM to 3500.
Runway 12L/R Non-DME aircraft requires an ATC climb gradient of 594′ per NM to 3500.
Runway 17 requires an ATC climb gradient of 403′ per NM to 3500.

NOTE: RADAR required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Fly assigned heading for radar vectors to intercept MSP R-281 and DWN R-095 to DWN VORTAC. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude.

DME EQUIPPED AIRCRAFT RWY 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

NON DME EQUIPPED AIRCRAFT RWY 12L/R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAY 17: For assigned headings from 230° clockwise to 285° cross MSP 8 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAYS 4, 22, 30L/R, 35: Initially assigned heading, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

ABERDEEN TRANSITION (DWN2.ABR): From over DWN VORTAC via DWN R-271 and ABR R-088 to ABR VOR/DME.

TAKE-OFF OBSTACLE NOTES:

RWY 4: Multiple trees beginning 800′ from DER, 264′ left of centerline, up to 75′ AGL/921′ MSL.
Rod on building 2528′ from DER, 1175′ left of centerline, 78′ AGL/922′ MSL.
Fence 803′ from DER, 585′ left of centerline, 15′ AGL/860′ MSL.
Antenna on OL building 456′ from DER, 319′ left of centerline, 13′ AGL/850′ MSL.
Light poles 1932′ from DER, 718′ left of centerline, 45′ AGL/885′ MSL.
Stack 4535′ from DER, 481′ left of centerline, 139′ AGL/949′ MSL.

RWY 12R: Multiple trees beginning 1477′ from DER, 407′ left of centerline, up to 86′ AGL/851′ MSL.
Multiple trees beginning 1426′ from DER, 124′ right of centerline, up to 111′ AGL/847′ MSL.
Light pole 1408′ from DER, 746′ right of centerline, 85′ AGL/843′ MSL.
Radar reflector 983′ from DER, 32′ left of centerline, 15′ AGL/829′ MSL.
Pipe on building, 826′ from DER, 576′ left of centerline, 10′ AGL/825′ MSL.
OL on LOC 766′ from DER, on centerline, 7′ AGL/821′ MSL.

RWY 17: Antenna 1272′ from DER, 562′ right of centerline, 57′ AGL/891′ MSL.
Pole 409′ from DER, 530′ right of centerline, 29′ AGL/866′ MSL.
Wind direction indicator on building 2619′ from DER, 881′ left of centerline, 97′ AGL/918′ MSL.
Building 2619′ from DER, 859′ left of centerline, 84′ AGL/905′ MSL
Light 1176′ from DER, 291′ right of centerline, 11′ AGL/875′ MSL.
Tree 2619′ from DER, on centerline, 79′ AGL/900′ MSL.

RWY 22: Tree 2906′ from DER, 833′ right of centerline, 94′ AGL/934′ MSL.
Hopper 1717′ from DER, 456′ left of centerline, 48′ AGL/888′ MSL.

RWY 30L: Multiple trees beginning 1113′ from DER, 701′ left of centerline , up to 80′ AGL/919′ MSL.
Tree 1230′ from DER, 633′ right of centerline, 30′ AGL/877′ MSL.
Ground 28′ from DER, 490′ right of centerline 0′ AGL/844′ MSL.

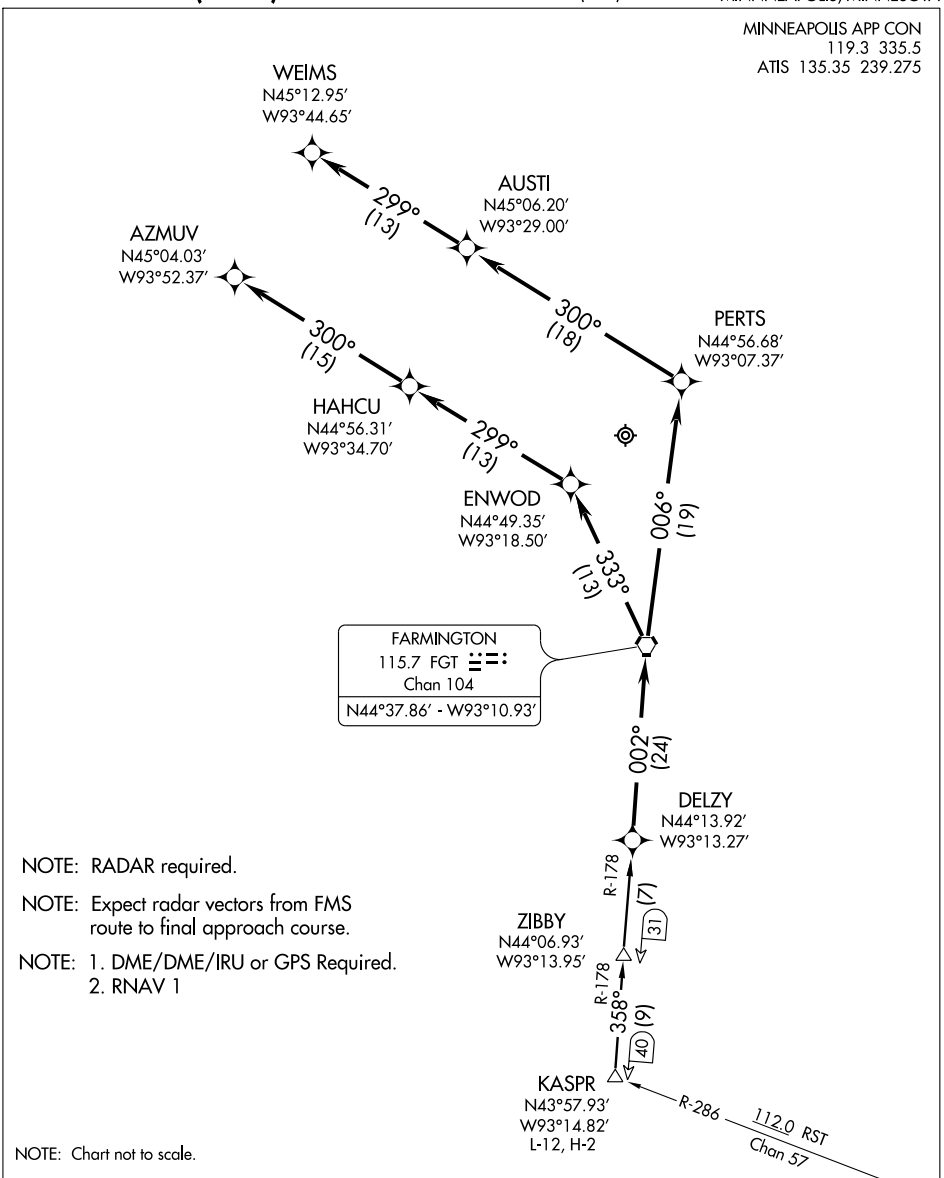
RWY 30R: Building 1056′ from DER, 198′ left of centerline, 13′ AGL/853′ MSL.
Multiple trees beginning 3010′ from DER, 334′ left of centerline, up to 94′ AGL/940′ MSL.
Light pole 1849′ from DER, 698′ right of centerline, 17′ AGL/871′ MSL.
Fence 1327′ from DER, 667′ right of centerline, 8′ AGL/857′ MSL.
Tree 3703′ from DER, 350′ right of centerline, 67′ AGL/914′ MSL.
Rod on pole 3143′ from DER, 47′ right of centerline, 38′ AGL/898′ MSL.

RWY 35: Tree 175′ from DER, 398′ right of centerline, 73′ AGL/883′ MSL.
Multiple trees beginning 1989′ from DER, 351′ left of centerline, up to 65′ AGL/902′ MSL.
Multiple buildings beginning 5.5 NM from DER, 1787′ left of centerline, up to 811′ AGL/1743′ MSL.

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DELZY ONE (FMS) ARRIVAL

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN
ST-264 (FAA)
MINNNEAPOLIS, MINNESOTA



Via the KASPR STAR from over DELZY WP: Thence . . . .
FOR RUNWAY 12L ARRIVALS: To FGT VORTAC to PERTS WP to AUSTI WP to WEIMS WP.
FOR RUNWAY 12R ARRIVALS: To FGT VORTAC to ENWOD WP to HAHCU WP to AZMUV WP.

DELZY ONE (FMS) ARRIVAL

MINNNEAPOLIS, MINNESOTA
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN

08157

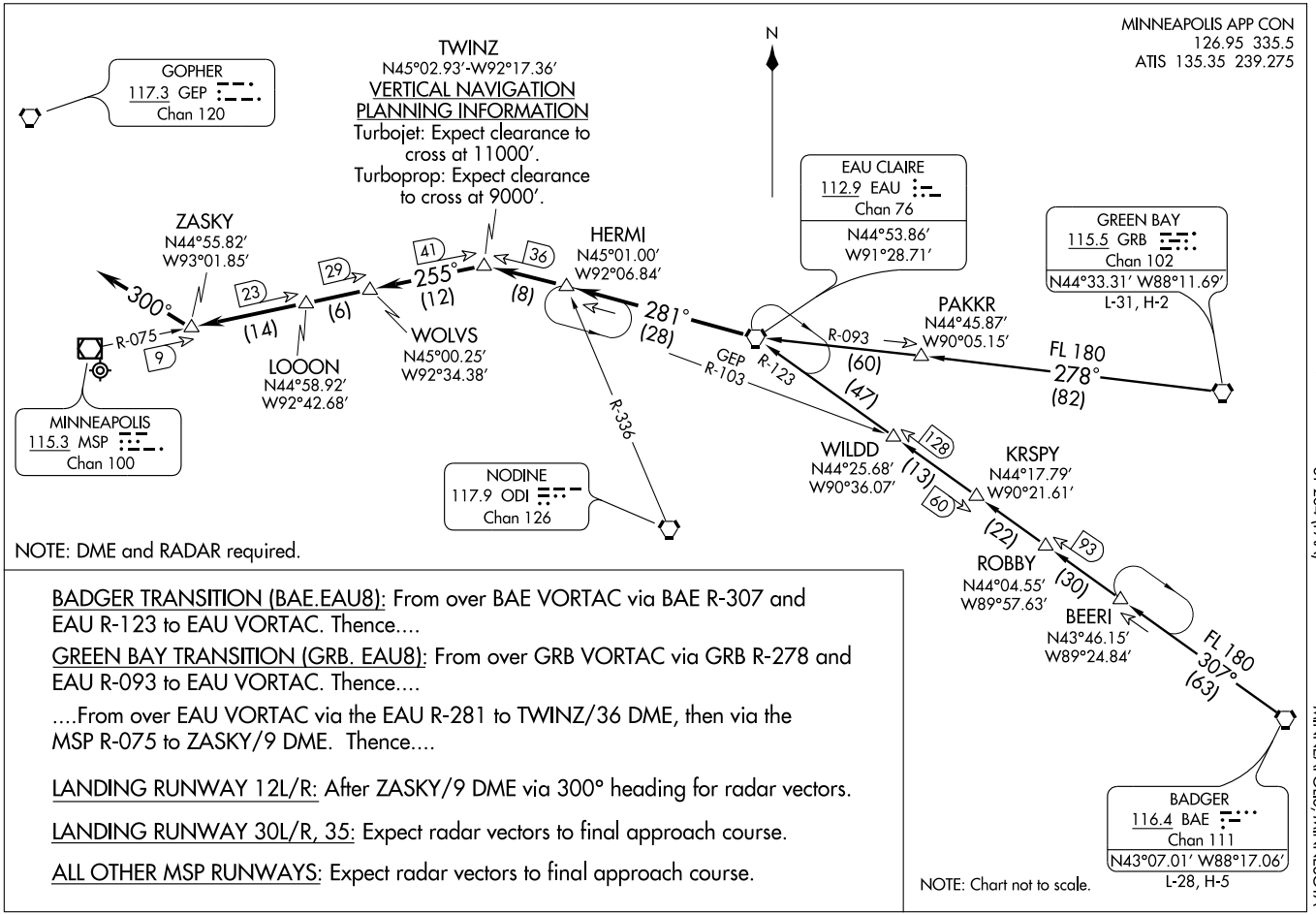
NC-1, 21 OCT 2010 to 18 NOV 2010

EAU CLAIRE EIGHT ARRIVAL

(EAU.EAU8) 08157

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN

MINNEAPOLIS, MINNESOTA



NOTE: DME and RADAR required.

BADGER TRANSITION (BAE.EAU8): From over BAE VORTAC via BAE R-307 and EAU R-123 to EAU VORTAC. Thence....

GREEN BAY TRANSITION (GRB. EAU8): From over GRB VORTAC via GRB R-278 and EAU R-093 to EAU VORTAC. Thence....

....From over EAU VORTAC via the EAU R-281 to TWINZ/36 DME, then via the MSP R-075 to ZASKY/9 DME. Thence....

LANDING RUNWAY 12L/R: After ZASKY/9 DME via 300° heading for radar vectors.

LANDING RUNWAY 30L/R, 35: Expect radar vectors to final approach course.

ALL OTHER MSP RUNWAYS: Expect radar vectors to final approach course.

EAU CLAIRE EIGHT ARRIVAL

(EAU.EAU8) 08157

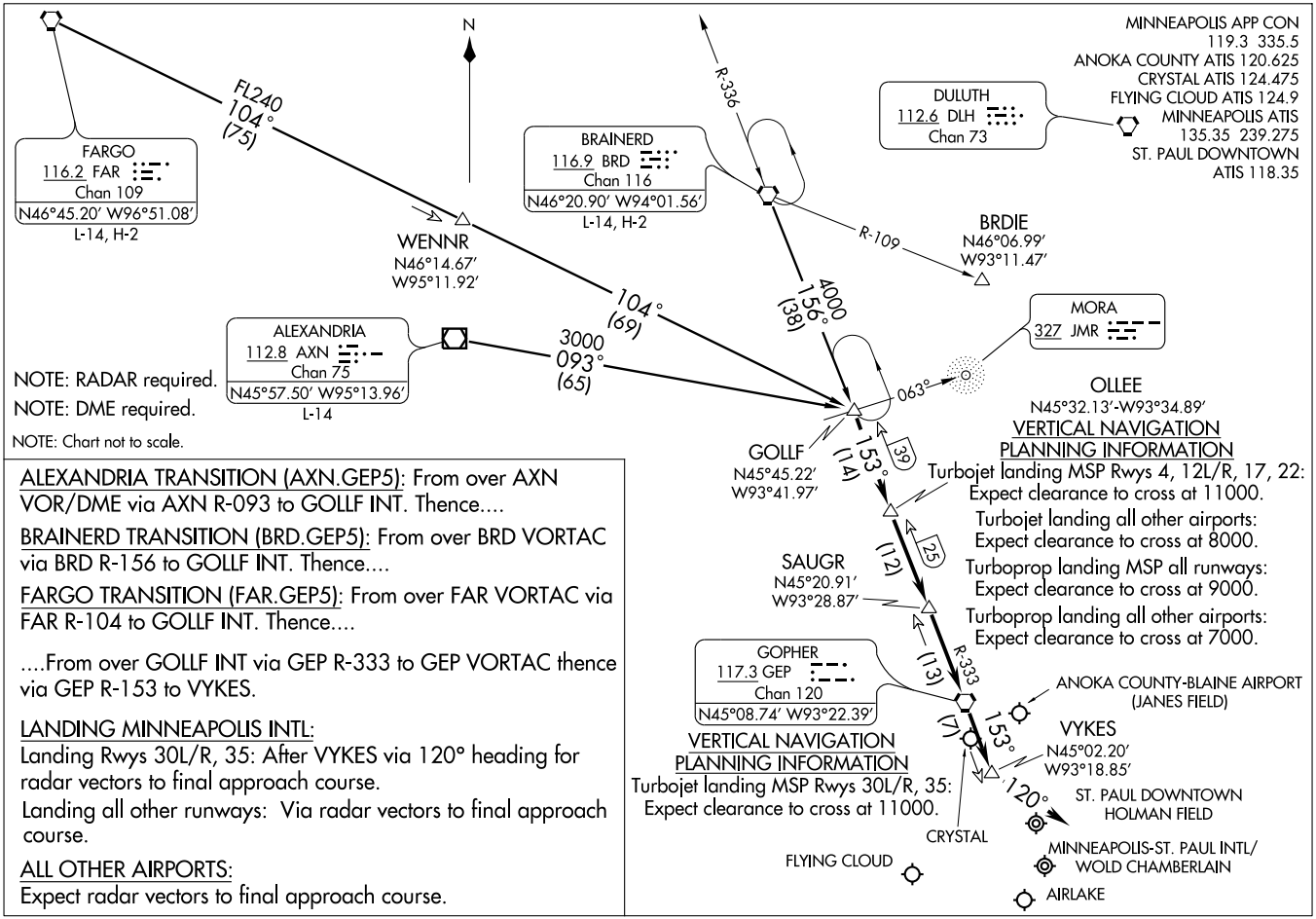
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN

MINNEAPOLIS, MINNESOTA

ST-264 (FAA)

GOPHER FIVE ARRIVAL

(GEP.GEP5) 08157



NOTE: RADAR required.

NOTE: DME required.

NOTE: Chart not to scale.

ALEXANDRIA TRANSITION (AXN.GEP5): From over AXN VOR/DME via AXN R-093 to GOLLF INT. Thence....

BRAINERD TRANSITION (BRD.GEP5): From over BRD VORTAC via BRD R-156 to GOLLF INT. Thence....

FARGO TRANSITION (FAR.GEP5): From over FAR VORTAC via FAR R-104 to GOLLF INT. Thence....

....From over GOLLF INT via GEP R-333 to GEP VORTAC thence via GEP R-153 to VYKES.

LANDING MINNEAPOLIS INTL:

Landing Rwys 30L/R, 35: After VYKES via 120° heading for radar vectors to final approach course.

Landing all other runways: Via radar vectors to final approach course.

ALL OTHER AIRPORTS:

Expect radar vectors to final approach course.

GOPHER FIVE ARRIVAL

(GEP.GEP5) 08157

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA

MINNEAPOLIS, MINNESOTA

HOT SPOTS

An "airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness, and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HS 1", "HS 2", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

CITY/AIRPORT	HOT SPOT	DESCRIPTION*
DULUTH, MN		
DULUTH INTL (DLH)	HS 1	Rwy 27 apch area.
	HS 2	Apch end of Rwy 27 located at Twy A5.
	HS 3	Rwy 21 via Twy A and Twy C complex int.
GRAND FORKS, ND		
GRAND FORKS INTL (GFK)	HS 1	Rwy 09L and Twy A int.
	HS 2	Rwy 17R and Twy B int.
MINNEAPOLIS, MN		
CRYSTAL (MIC)	HS 1	Short distance between rwys.
	HS 2	Short distance between rwys.
	HS 3	Short distance between rwys.
	HS 4	Int of Rwy 06R (sod) on Twy F.
	HS 5	Int of Rwy 24L (sod) on Twy D.
	HS 6	Multiple vehicle/pedestrian deviations occurrence.
	HS 7	Close proximity of Rwy 14R and Rwy 06R.
	HS 8	Rwy 24R proximity to Twy E and Twy B int.
MINNEAPOLIS, MN		
FLYING CLOUD (FCM)	HS 1	Hold position markings/sign proximity to Twy A.
	HS 2	Hold position markings/sign proximity to Twy A.
	HS 3	Hold position markings/sign proximity to Twy A.
	HS 4	Hold position markings/sign proximity to Twy A.
	HS 5	Hold position markings/sign proximity to Twy A.
	HS 6	Hold position markings/sign proximity to Twy A.
	HS 7	Hold position markings/sign proximity to Twy A.
	HS 8	Hold position markings/sign proximity to Twy A.
	HS 9	Rwy 18 apch area along Twy A.
	HS 10	Proximty of parallel rwys and holding positions.
	HS 11	Short distance between rwy hold short lines.
MINNEAPOLIS, MN		
MINNEAPOLIS-ST PAUL INTL/ WOLD-CHAMBERLAIN (MSP)	HS 1	Complex int of Twy A, Twy B, Twy C, Twy D, and Twy H in near proximity to Rwy 12R-30L and Rwy 04-22.
	HS 2	Complex twy/rwy geometry.
	HS 3	Complex int of Twy C, Twy D, Twy P, and Twy Q in near proximity to Rwy 12L-30R and Rwy 04-22.
	HS 4	Complex geometry at Rwy 04 apch end.
SIOUX FALLS, SD		
JOE FOSS FIELD (FSD)	HS 1	Complex twy int in close proximity of rwys.

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*See appropriate A/FD, Alaska or Pacific Supplement HOT SPOT table for additional information.

ILS or LOC RWY 12L

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

LOC/DME I-PJL	APP CRS	Rwy Idg	7620
110.7	120°	TDZE	839
Chan 44		Apt Elev	841

For inoperative ALSF, increase S-ILS 12L Cat E visibility to RVR 4000 and S-LOC 12L Cat E visibility to 2½ mile. For inoperative ALSF when using AASUN fix minimums, increase S-LOC Cat E visibility to 1½ mile.

ALSF-2

MISSED APPROACH: Climb to 1500, then climbing left turn to 4000 via heading 350° and FCM VOR/DME R-046 to WHISK Int/GEP 17.5 DME and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	

ALTERNATE MISSED APCH FIX GOPHER GEP 117.3 Chan 120 R-297 297° 117°

RADAR REQUIRED

GOPHER 117.3 GEP Chan 120

MINNEAPOLIS 115.3 MSP Chan 100

WHISK GEP 17.5

R-085 085° 265°

R-232 R-217 R-200 R-183 R-170 R-011 FCM R-046 MSP R-037

10 NM

2438

300° 120° (2.9) *6000 *5000 (2.9) *4000 (3) 3000 (3)

(IAF) CCJAY INT I-PJL 19.4

UBTYA INT I-PJL 16.5

(IF) ALGIN INT I-PJL 13.6

HAMML INT I-PJL 10.7

WASHY INT I-PJL 7.7 RADAR

AASUN I-PJL 3.5 RADAR

LOCALIZER 110.7 I-PJL Chan 44

FLYING CLOUD 117.7 FCM Chan 124

115.7 FGT Chan 104

MSA FCM 25 NM 180° 3500 270° 2800

1549 1539 1743 1290 1230 1085± 1040 IM 1144 1006 979± 949 1033 932 1192 1042 1110± 1060 1305

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* When assigned by ATC, intercept glidepath at 4000 or 5000 or 6000.

1500	4000 hdg 350°	FCM R-046 117.7	WHISK

CCJAY INT I-PJL 19.4 — UBTYA INT I-PJL 16.5 — ALGIN INT I-PJL 13.6 — HAMML INT I-PJL 10.7 — WASHY INT I-PJL 7.7 RADAR — AASUN I-PJL 3.5 RADAR — I-PJL 2.1 — I-PJL 1.2 — # LOC only

7000 *6000 120° *5000 *4000 3000 #1520 IM

GS 3.00° TCH 52

VGSI and ILS glidepath not coincident

2.9 NM | 2.9 NM | 3 NM | 3 NM | 4.2 NM | 1.3 NM | 0.9 | 0.1

CATEGORY	A	B	C	D	E
S-ILS 12L	1039/18 200 (200-½)				
S-LOC 12L	1520/24 681 (700-½)		1520-1½ 681 (700-1½)	1520-1¾ 681 (700-1¾)	1520-2 681 (700-2)
CIRCLING	1520-1 679 (700-1)		1520-2 679 (700-2)	1520-2¼ 679 (700-2¼)	1660-3 819 (900-3)
AASUN FIX MINIMUMS					
S-LOC 12L	1240/24 401 (400-½)		1240/40 401 (400-¾)		1240/50 401 (400-1)
CIRCLING	1360-1 519 (600-1)		1360-1½ 519 (600-1½)	1460-2 619 (700-2)	1660-3 819 (900-3)

ELEV 841 D

120° 6.5 NM from FAF

TDZE 839

950± 996 906± 859± 865± 8000 X 150 11,000 X 150 8200 X 150 10,000 X 200 0.3% DOWN 0.5% DOWN 12 22 17 35 30R 30L

HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

FAF to MAP 6.5 NM

Knots	60	90	120	150	180
Min:Sec	6:30	4:20	3:15	2:36	2:10

LOC/DME	APP CRS	Rwy Idg	10000
I-HKZ 110.3 Chan 40	120°	TDZE	841
		Apt Elev	841

ILS or LOC RWY 12R

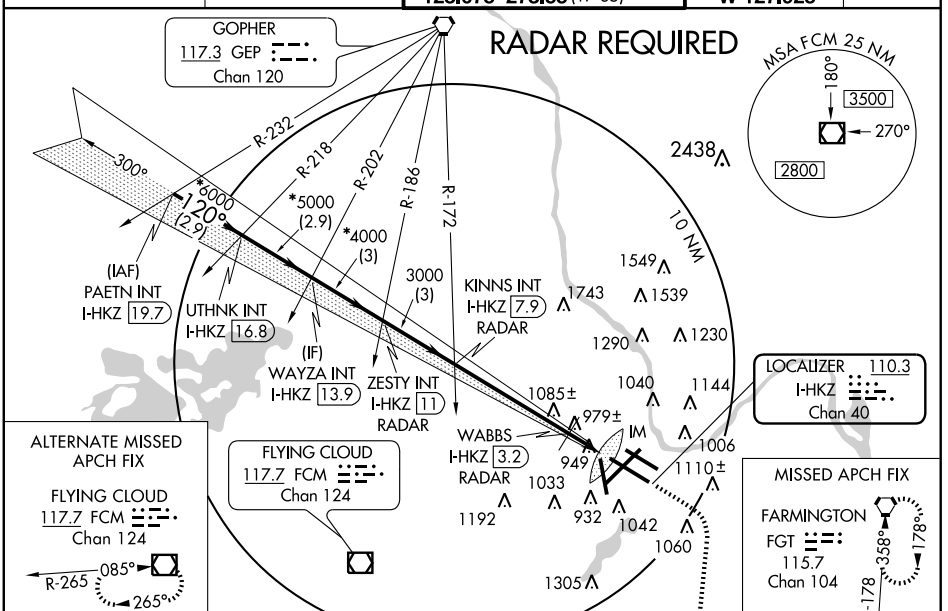
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

For inoperative ALSF, increase S-ILS 12R Cat E visibility to RVR 4000 and S-LOC 12R Cat E visibility to 2. WABBS fix minimums: For inoperative ALSF, increase S-LOC 12R Cat E visibility to 1½.

ALSF-2

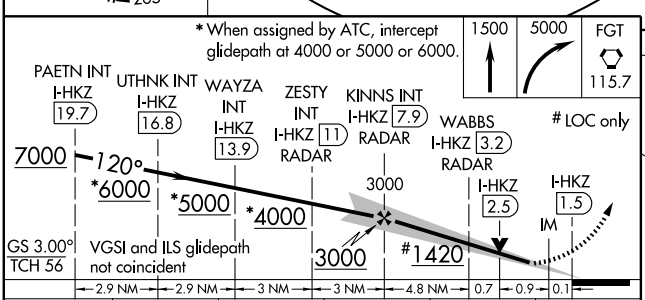
MISSED APPROACH: Climb to 1500 then climbing right turn to 5000 direct FGT VORTAC and hold, continue climb-in-hold to 5000.

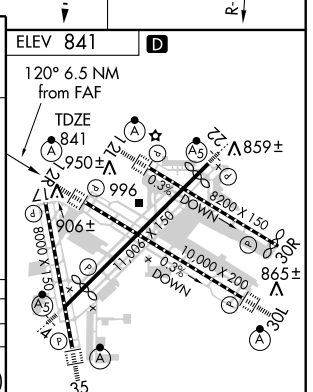
ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	119.3 335.5	123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22) 123.675 273.55 (17-35)	N 121.8 348.6 S 121.9 348.6 W 127.925	133.2



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CATEGORY	A	B	C	D	E
S-ILS 12R	1041/18 200 (200-½)				
S-LOC 12R	1420/24 579 (600-½)		1420/50 579 (600-1)	1420/60 579 (600-1¼)	1420-1½ 579 (600-1½)
CIRCLING	1420-1 579 (600-1)		1420-1½ 579 (600-1½)	1460-2 619 (700-2)	1660-3 819 (900-3)
WABBS FIX MINIMUMS					
S-LOC 12R	1240/24 399 (400-½)			1240/40 399 (400-¾)	1240/50 399 (400-1)
CIRCLING	1360-1 519 (600-1)		1360-1½ 519 (600-1½)	1460-2 619 (700-2)	1660-3 819 (900-3)

FAF to MAP 6.5 NM					
Knots	60	90	120	150	180
Min:Sec	6:30	4:20	3:15	2:36	2:10

LOC/DME I-MSP	APP CRS	Rwy Idg	10000
110.3	299°	TDZE	823
Chan 40		Apt Elev	841

ILS or LOC RWY 30L

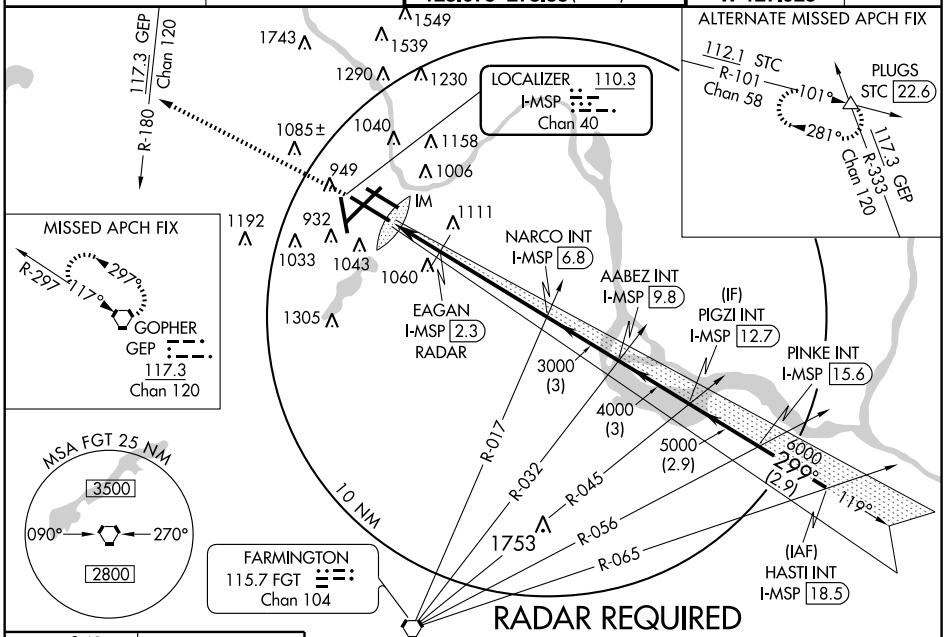
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

For inoperative ALSF, increase S-ILS 30L Cat E visibility to RVR 4000 and S-LOC 30L Cat E visibility to 2.

ALSF-2

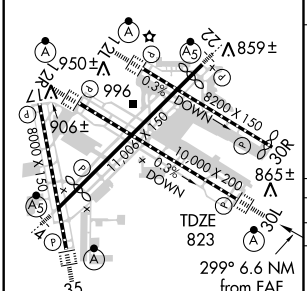
MISSED APPROACH: Climb to 1300, then climb to 4000 via heading 295° and GEP VORTAC R-180 to GEP and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	



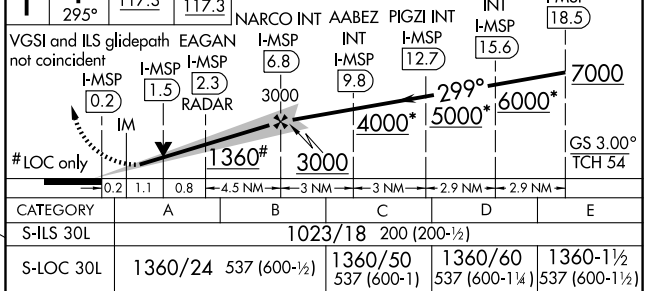
RADAR REQUIRED

ELEV 841 D



HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

FAF to MAP 6.6 NM					
Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12



CATEGORY	A	B	C	D	E
S-ILS 30L	1023/18 200 (200-½)				
S-LOC 30L	1360/24 537 (600-½)		1360/50 537 (600-1)	1360/60 537 (600-1¼)	1360-1½ 537 (600-1½)
CIRCLING	1360-1 519 (600-1)		1360-1½ 519 (600-1½)	1460-2 619 (700-2)	1660-3 819 (900-3)
EAGAN FIX MINIMUMS					
S-LOC 30L	1280/24 457 (500-½)		1280/40 457 (500-¾)	1280/50 457 (500-1)	
CIRCLING	1360-1 519 (600-1)		1360-1½ 519 (600-1½)	1460-2 619 (700-2)	1660-3 819 (900-3)

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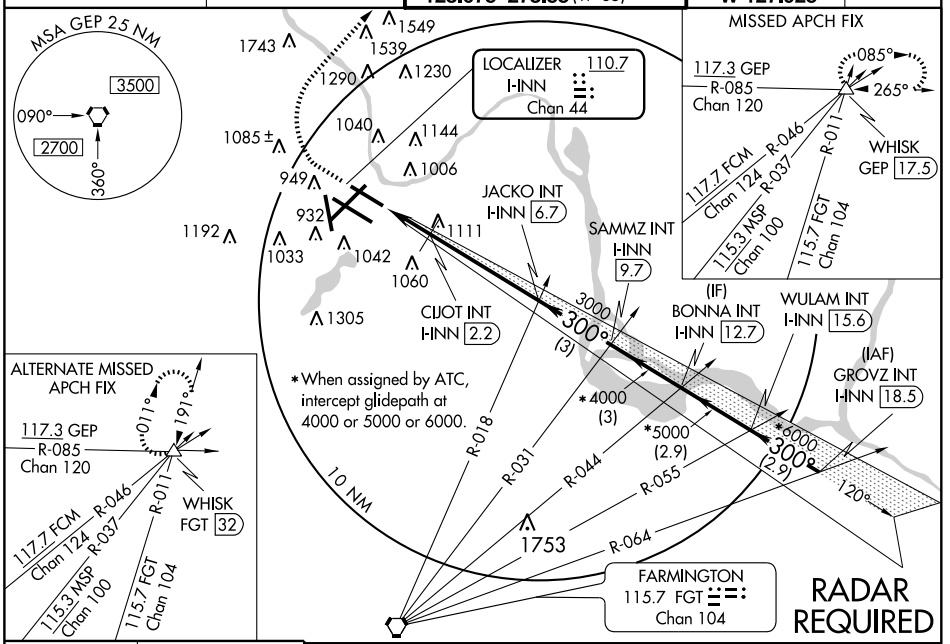
LOC/DME I-INN	APP CRS	Rwy Idg	8000
110.7	300°	TDZE	823
Chan 44		Apt Elev	841

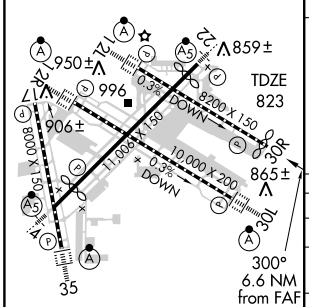
ILS or LOC RWY 30R

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

MISSED APPROACH: Climb to 1300 then climbing right turn to 4000 via heading 040° and GEP VORTAC R-085 to WHISK INT/17.5 DME and hold.

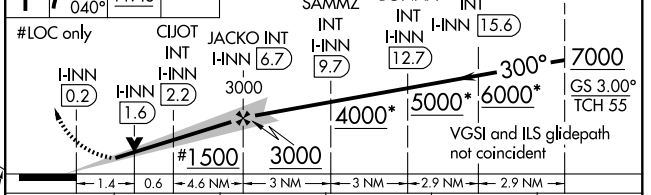
ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	





HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

FAF to MAP 6.6 NM					
Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12



CATEGORY	A	B	C	D	E
S-ILS 30R	1073/40 250 (300-¾)				
S-LOC 30R	1500/50 677 (700-1)		1500-2 677 (700-2)	1500-2¼ 677 (700-2¼)	1500-2½ 677 (700-2½)
CIRCLING	1500-1 659 (700-1)		1500-2 659 (700-2)	1500-2¼ 659 (700-2¼)	1660-3 819 (900-3)
DME MINIMUMS					
S-LOC 30R	1340/50 517 (500-1)		1340-1½ 517 (500-1½)	1340-1¾ 517 (500-1¾)	
CIRCLING	1360-1 519 (600-1)		1360-1½ 519 (600-1½)	1460-2 619 (700-2)	1660-3 819 (900-3)

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ILS or LOC RWY 35

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

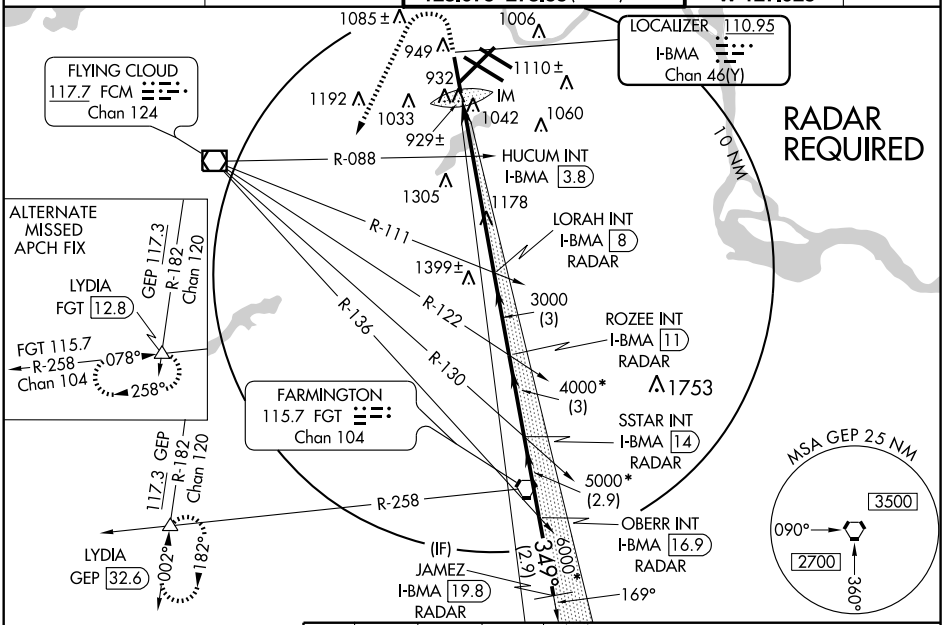
LOC/DME I-BMA	APP CRS	Rwy Idg	8000
110.95	349°	TDZE	834
Chan 46 (Y)		Apt Elev	841

For inoperative ALSF, increase S-ILS 35 Cat E visibility to RVR 4000, increase all S-LOC 35 Cat E visibilities to ½ mile.

ALSF-2

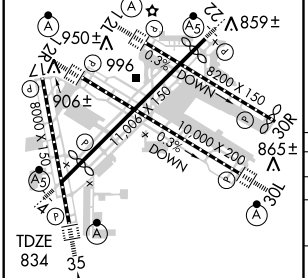
MISSED APPROACH: Climb to 1600 then climbing left turn to 5000 via heading 240° and GEP R-182 to LYDIA INT/GEP 32.6 DME and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	



ELEV 841 D

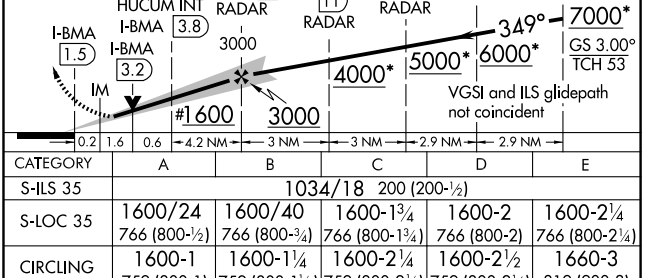
HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35



FAF to MAP 6.5 NM					
Knots	60	90	120	150	180
Min:Sec	6:30	4:20	3:15	2:36	2:10

1600	5000 hdg 240°	GEP R-182 117.3	LYDIA △

* When assigned by ATC, intercept glidepath at 4000 or 5000 or 6000 or 7000.



CATEGORY	A	B	C	D	E
S-ILS 35	1034/18 200 (200-½)				
S-LOC 35	1600/24 766 (800-½)	1600/40 766 (800-¾)	1600-1¾ 766 (800-1¾)	1600-2 766 (800-2)	1600-2¼ 766 (800-2¼)
CIRCLING	1600-1 759 (800-1)	1600-1¼ 759 (800-1¼)	1600-2¼ 759 (800-2¼)	1600-2½ 759 (800-2½)	1660-3 819 (900-3)
HUCUM FIX MINIMUMS					
S-LOC 35	1460/24 626 (700-½)		1460/60 626 (700-1¼)	1460-1½ 626 (700-1½)	1460-1¾ 626 (700-1¾)
CIRCLING	1460-1 619 (700-1)		1460-1¾ 619 (700-1¾)	1460-2 619 (700-2)	1660-3 819 (900-3)

NC-1, 21 OCT 2010 to 18 NOV 2010

LOC/DME I-PJL	APP CRS	Rwy Idg	7620
110.7	120°	TDZE	839
Chan 44		Apt Elev	841

ILS RWY 12L (CAT II)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

ALSF-2

MISSED APPROACH: Climb to 1500, then climbing left turn to 4000 via heading 350° and FCM VOR/DME R-046 to WHISK Int/GEP 17.5 DME and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	

ALTERNATE MISSED APCH FIX GOPHER GEP 117.3 Chan 120

R-297 297° 117°

RADAR REQUIRED

GOPHER 117.3 GEP Chan 120

WHISK GEP 17.5

085° 265°

R-085 R-232 R-217 R-200 R-183 R-170 R-011 R-037 R-046

FCM MSP

10 NM

MINNEAPOLIS 115.3 MSP Chan 100

2438

300° 120° *6000 (2.9) *5000 (2.9) *4000 (3) 3000 (3)

(IAF) CCJAY INT I-PJL 19.4

UBTYA INT I-PJL 16.5

(IF) ALGIN INT I-PJL 13.6

HAMML INT I-PJL 10.7

WASHY INT I-PJL 7.7 RADAR

1549 1539 1743 1290 1230 1085± 1040 IM 1144 1006 979± 949 932 1192 1033 1042 1110± 1060 1305

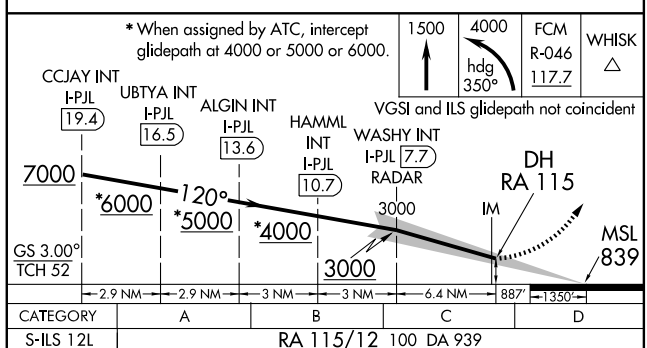
FLYING CLOUD 117.7 FCM Chan 124

LOCALIZER 110.7 I-PJL Chan 44

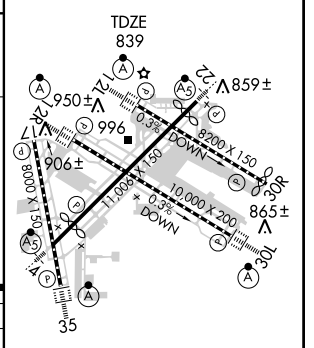
115.7 FGT Chan 104

MSA FCM 25 NM 180° 3500 270° 2800

ELEV 841 D



CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC/DME I-PJL	APP CRS	Rwy Idg	7620
110.7	120°	TDZE	839
Chan 44		Apt Elev	841

ILS RWY 12L (CAT III)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

ALSF-2

MISSED APPROACH: Climb to 1500, then climbing left turn to 4000 via heading 350° and FCM VOR/DME R-046 to WHISK Int/GEP 17.5 DME and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	

ALTERNATE MISSED APCH FIX GOPHER GEP 117.3 Chan 120

297° 117° R-297

RADAR REQUIRED

R-085 085° 265° WHISK GEP 17.5

GOPHER 117.3 GEP Chan 120

R-232 R-217 R-200 R-183 R-170

300° 120° (2.9) *6000 *5000 (2.9) *4000 (3) 3000 (3)

2438

10 NM

FCM R-046 MSP R-037 R-011

MINNEAPOLIS 115.3 MSP Chan 100

(IAF) CCJAY INT I-PJL 19.4

UBTYA INT I-PJL 16.5

(IF) ALGIN INT I-PJL 13.6

HAMML INT I-PJL 10.7

WASHY INT I-PJL 7.7 RADAR

1549 1539 1743 1290 1230 1085± 1040 IM 1144 1006 979± 949 932 1192 1033 1042 1110± 1060 1305

FLYING CLOUD 117.7 FCM Chan 125

LOCALIZER 110.7 I-PJL Chan 44

115.7 FGT Chan 104

MSA FCM 25 NM 180° 3500 270° 2800

ELEV 841 D

* When assigned by ATC, intercept glidepath at 4000 or 5000 or 6000.

1500 4000 hdg 350° FCM R-046 117.7 WHISK

VGSI and ILS glidepath not coincident

CCJAY INT I-PJL 19.4 UBTYA INT I-PJL 16.5 ALGIN INT I-PJL 13.6 HAMML INT I-PJL 10.7 WASHY INT I-PJL 7.7 RADAR IM

7000 *6000 120° *5000 *4000 3000 950 MSL 839

GS 3.00° TCH 52

2.9 NM 2.9 NM 3 NM 3 NM 6.4 NM 902' 1350'

CATEGORY	A	B	C	D
S-ILS 12L	CAT IIIa		RVR 07	
S-ILS 12L	CAT IIIb		RVR 06	
S-ILS 12L	CAT IIIc		NA	

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZE 839

950± 996 906± 859± 865± 9200 X 150 0.3% DOWN 11,600 X 150 10,000 X 200 8000 X 150

HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ILS RWY 12R (CAT II)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

LOC/DME I-HKZ	APP CRS	Rwy Idg	10000
110.3	120°	TDZE	841
Chan 40		Apt Elev	841

ALSF-2

MISSED APPROACH: Climb to 1500 then climbing right turn to 5000 direct FGT VORTAC and hold, continue climb-in-hold to 5000.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	

RADAR REQUIRED

GOPHER 117.3 GEP Chan 120

MSA FCM 25 NM: 180° 3500, 270° 2800

R-232 R-218 R-202 R-186 R-172 300° 120° 10 NM

*6000 (2.9) *5000 (2.9) *4000 (3) 3000 (3)

(IAF) PAETN INT I-HKZ 19.7

UTHNK INT I-HKZ 16.8

(IF) WAYZA INT I-HKZ 13.9

ZESTY INT I-HKZ 11 RADAR

KINNS INT I-HKZ 7.9 RADAR

2438 1549 1743 1539 1290 1230 1085± 1040 1144 979± IM 1006 949 1110± 1033 1192 932 1042 1060 1305

LOCALIZER 110.3 I-HKZ Chan 40

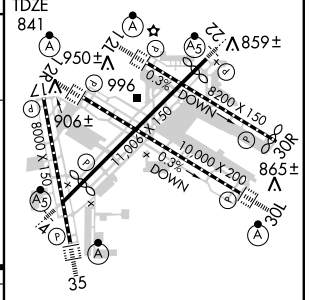
FLYING CLOUD 117.7 FCM Chan 124

MISSED APCH FIX: FARMINGTON FGT 115.7 Chan 104; 358° 178° R-178

ALTERNATE MISSED APCH FIX: FLYING CLOUD 117.7 FCM Chan 124; R-265 085° 265°

ELEV 841 D

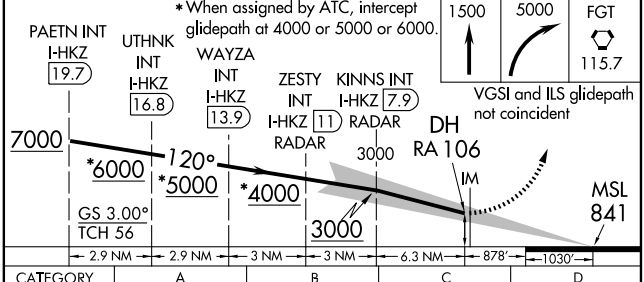
TDZE 841



* When assigned by ATC, intercept glidepath at 4000 or 5000 or 6000.

1500 5000 FGT 115.7

VGSI and ILS glidepath not coincident



CATEGORY	A	B	C	D
S-ILS 12R	RA 106/12 100 DA 941			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ILS RWY 12R (CAT III)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

LOC/DME I-HKZ	APP CRS	Rwy Idg	10000
110.3	120°	TDZE	841
Chan 40		Apt Elev	841

ALSF-2

MISSED APPROACH: Climb to 1500 then climbing right turn to 5000 direct FGT VORTAC and hold, continue climb-in-hold to 5000.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	

GOPHER 117.3 GEP Chan 120

RADAR REQUIRED

MSA FCM 25 NM: 180° 3500, 270° 2800

R-232 R-218 R-202 R-186 R-172

300° 120° 12.9

*6000 *5000 (2.9) *4000 (3) 3000 (3)

2438

10 NM

(IAF) PAETN INT I-HKZ 19.7

UTHNK INT I-HKZ 16.8

(IF) WAYZA INT I-HKZ 13.9

ZESTY INT I-HKZ 11 RADAR

KINNS INT I-HKZ 7.9 RADAR

1549 1743 1539 1290 1230 1085± 1040 1144 979± IM 1006 949 1110± 1033 1192 932 1042 1060 1305

LOCALIZER 110.3 I-HKZ Chan 40

FLYING CLOUD 117.7 FCM Chan 124

MISSED APCH FIX: FARMINGTON FGT 115.7 Chan 104; 358° 178° R-178

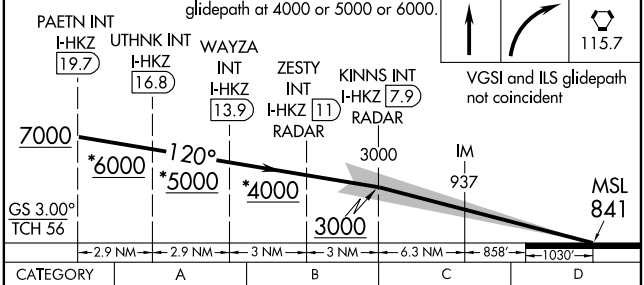
ALTERNATE MISSED APCH FIX: FLYING CLOUD 117.7 FCM Chan 124; R-265 085° 265°

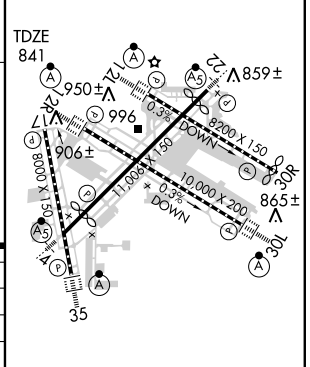
ELEV 841 D

*When assigned by ATC, intercept glidepath at 4000 or 5000 or 6000.

1500 5000 FGT 115.7

VGSI and ILS glidepath not coincident





CATEGORY	A	B	C	D
S-ILS 12R	CAT IIIa	RVR 07		
S-ILS 12R	CAT IIIb	NA		
S-ILS 12R	CAT IIIc	NA		

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC/DME I-MSP	APP CRS	Rwy Idg 10000
110.3	299°	TDZE 823
Chan 40		Apt Elev 841

ILS RWY 30L (CAT II)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

ALSF-2

MISSED APPROACH: Climb to 1300, then climb to 4000 via heading 295° and GEP VORTAC R-180 to GEP and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	

RADAR REQUIRED

117.3 GEP Chan 120 R-180

LOCALIZER 110.3 I-MSP Chan 40

ALTERNATE MISSED APCH FIX

112.1 STC R-101 Chan 58 101° 281° PLUGS STC 22.6 117.3 GEP R-333 Chan 120

MISSED APCH FIX

R-297 297° 117° GOPHER GEP 117.3 Chan 120

1549 1743 1539 1290 1230 1085± 1040 1158 949 1006 1192 932 IM 1111 1033 1043 1060 1305

NARCO INT I-MSP 6.8

AABEZ INT I-MSP 9.8

(IF) PIGZI INT I-MSP 12.7

PINKE INT I-MSP 15.6

3000 (3) 4000 (3) 5000 (2.9) 6000 (2.9)

299° 119°

10 NM

R-017 R-032 R-045 R-056 R-065

1753

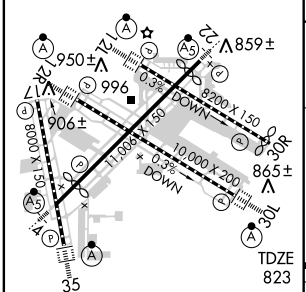
FARMINGTON 115.7 FGT Chan 104

(IAF) HASTI INT I-MSP 18.5

MSA FGT 25 NM 3500 090° 270° 2800

Missed approach obstructions require climb gradient of at least 500 FPM/100K, 750 FPM/150K, 1000 FPM/200K, no wind conditions. Aircraft to 885 feet MSL 789 feet north of Rwy centerline.

ELEV 841 D

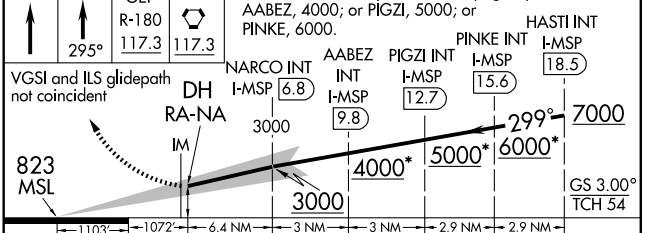


HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

1300 ↑	4000 ↑ 295°	GEP R-180 117.3	GEP 117.3

*When authorized by ATC, intercept glidepath at AABEZ, 4000; or PIGZI, 5000; or PINKE, 6000.

VGSI and ILS glidepath not coincident



CATEGORY	A	B	C	D
S-ILS 30L	RA-NA/12 110 DA 933			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ILS RWY 35 (CAT II)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

LOC/DME I-BMA	APP CRS	Rwy Idg	8000
110.95	349°	TDZE	834
Chan 46 (Y)		Apt Elev	841

ALSF-2

MISSED APPROACH: Climb to 1600 then climbing left turn to 5000 via heading 240° and GEP R-182 to LYDIA INT/ GEP 32.6 DME and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	

FLYING CLOUD 117.7 FCM Chan 124

LOCALIZER 110.95 I-BMA Chan 46(Y)

RADAR REQUIRED

10 NM

ALTERNATE MISSED APCH FIX

LYDIA FGT 12.8

GEP 117.3 R-182 Chan 120

FGT 115.7 R-258 Chan 104

078° 258°

FARMINGTON 115.7 FGT Chan 104

LYDIA GEP 32.6

002° 182°

1085± 1006 949 932 1110± 1192 1033 IM 1042 1060 929± 1305 1178

R-111 R-122 R-136 R-130 R-258

LORAH INT I-BMA 8 RADAR

1399± 3000 (3)

ROZEE INT I-BMA 11 RADAR

4000* (3) 1753

SSTAR INT I-BMA 14 RADAR

5000* (2.9)

OBERR INT I-BMA 16.9 RADAR

6000* (2.9)

(IF) JAMEZ I-BMA 19.8 RADAR

349°

169°

MSA GEP 25 NM

3500

090° 2700 360°

ELEV 841 D

950± 996 906± 859± 865± 834 MSL

8200 X 150 0.3% DOWN

11,000 X 150 0.3% DOWN

10,000 X 200 0.3% DOWN

8000 X 150

TDZE 834

HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

1600	5000	GEP R-182 117.3	LYDIA △
	hdg 240°		

* When assigned by ATC, intercept glidepath at 4000 or 5000 or 6000 or 7000.

DH RA 107 IM

LORAH INT I-BMA 8 RADAR

ROZEE INT I-BMA 11 RADAR

SSTAR INT I-BMA 14 RADAR

OBERR INT I-BMA 16.9 RADAR

JAMEZ I-BMA 19.8 RADAR

3000 4000* 5000* 6000* 7000*

349°

834 MSL

VGSI and ILS glidepath not coincident

GS 3.00° TCH 53

938' 1161' 6.3 NM 3 NM 3 NM 2.9 NM 2.9 NM

CATEGORY	A	B	C	D
S-ILS 35	RA 107/12 110 DA 944			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ILS RWY 35 (CAT III)

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

LOC/DME I-BMA	APP CRS	Rwy Idg	8000
110.95	349°	TDZE	834
Chan 46 (Y)		Apt Elev	841

ALSF-2

MISSED APPROACH: Climb to 1600 then climbing left turn to 5000 via heading 240° and GEP R-182 to LYDIA INT/ GEP 32.6 DME and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	

FLYING CLOUD 117.7 FCM Chan 124

LOCALIZER 110.95 I-BMA Chan 46(Y)

RADAR REQUIRED

10 NM

ALTERNATE MISSED APCH FIX

LYDIA FGT 12.8

GEP 117.3 R-182 Chan 120

FGT 115.7 R-258 Chan 104

078° 258°

FARMINGTON 115.7 FGT Chan 104

R-111 R-122 R-130 R-136 R-258

1085± 1006 949 932 1110± 1192 1033 IM 1042 1060 929± 1305 1178 1399± 3000 (3) 4000* (3) 5000* (2.9) 6000* (2.9) 1753

LORAH INT I-BMA 8 RADAR

ROZEE INT I-BMA 11 RADAR

SSTAR INT I-BMA 14 RADAR

OBERR INT I-BMA 16.9 RADAR

JAMEZ (IF) I-BMA 19.8 RADAR

349°

002° 182°

LYDIA GEP 32.6

MSA GEP 25 NM

3500 2700 090° 360°

ELEV 841 D

TDZE 834 35

950± 996 906± 859± 865± 8000 X 150 11,000 X 150 9200 X 150 10,000 X 200 0.3% DOWN 0.3% DOWN 4 17 22 30R 30L

HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

1600 5000 240° GEP R-182 117.3 LYDIA

* When assigned by ATC, intercept glidepath at 4000 or 5000 or 6000 or 7000.

LORAH INT I-BMA 8 RADAR 3000

ROZEE INT I-BMA 11 RADAR

SSTAR INT I-BMA 14 RADAR

OBERR INT I-BMA 16.9 RADAR

JAMEZ I-BMA 19.8 RADAR

IM 937

834 MSL

3000 4000* 5000* 6000* 7000*

VGSI and ILS glidepath not coincident

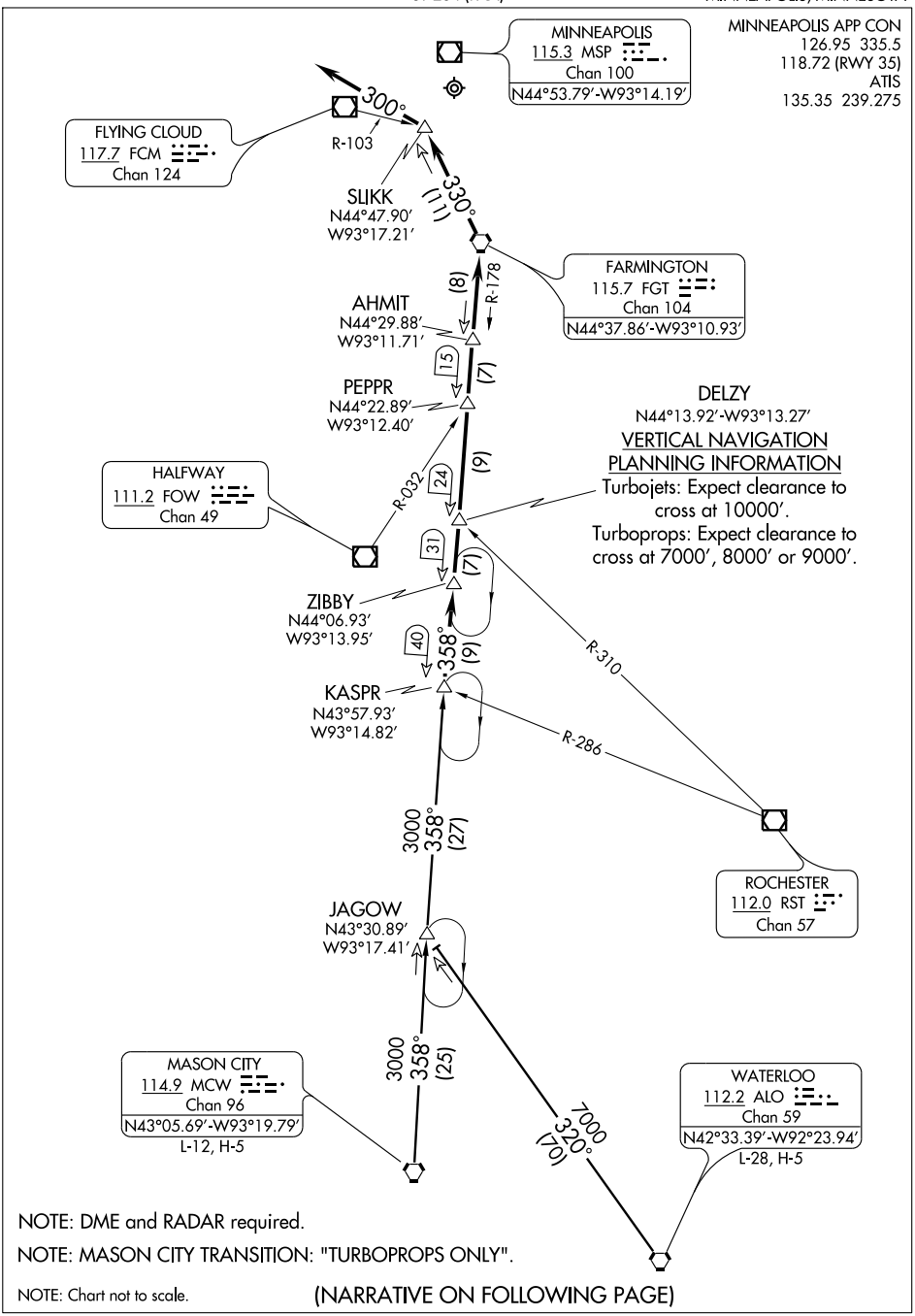
GS 3.00° TCH 53

938' 1021' 6.4 NM 3 NM 3 NM 2.9 NM 2.9 NM

CATEGORY	A	B	C	D
S-ILS 35	CAT IIIa	RVR 07		
S-ILS 35	CAT IIIb	RVR 06		
S-ILS 35	CAT IIIc	NA		

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010



NOTE: DME and RADAR required.

NOTE: MASON CITY TRANSITION: "TURBOPROPS ONLY".

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ARRIVAL ROUTE DESCRIPTION

MASON CITY TRANSITION (MCW.KASPR4) (TURBOPROPS ONLY): From over MCW VORTAC via MCW R-358 and FGT R-178 to KASPR INT. Thence....
WATERLOO TRANSITION (ALO.KASPR4): From over ALO VORTAC via ALO R-320 to JACOW INT, then via MCW R-358 and FGT R-178 to KASPR INT. Thence....

....From over KASPR INT via FGT R-178 to FGT VORTAC.

LANDING RUNWAYS 12L/12R:
After FGT VORTAC via FGT R-330 to SLIKK INT thence via 300° heading for radar vectors to final approach course.

LANDING ALL OTHER RUNWAYS:
Via radar vectors to final approach course.

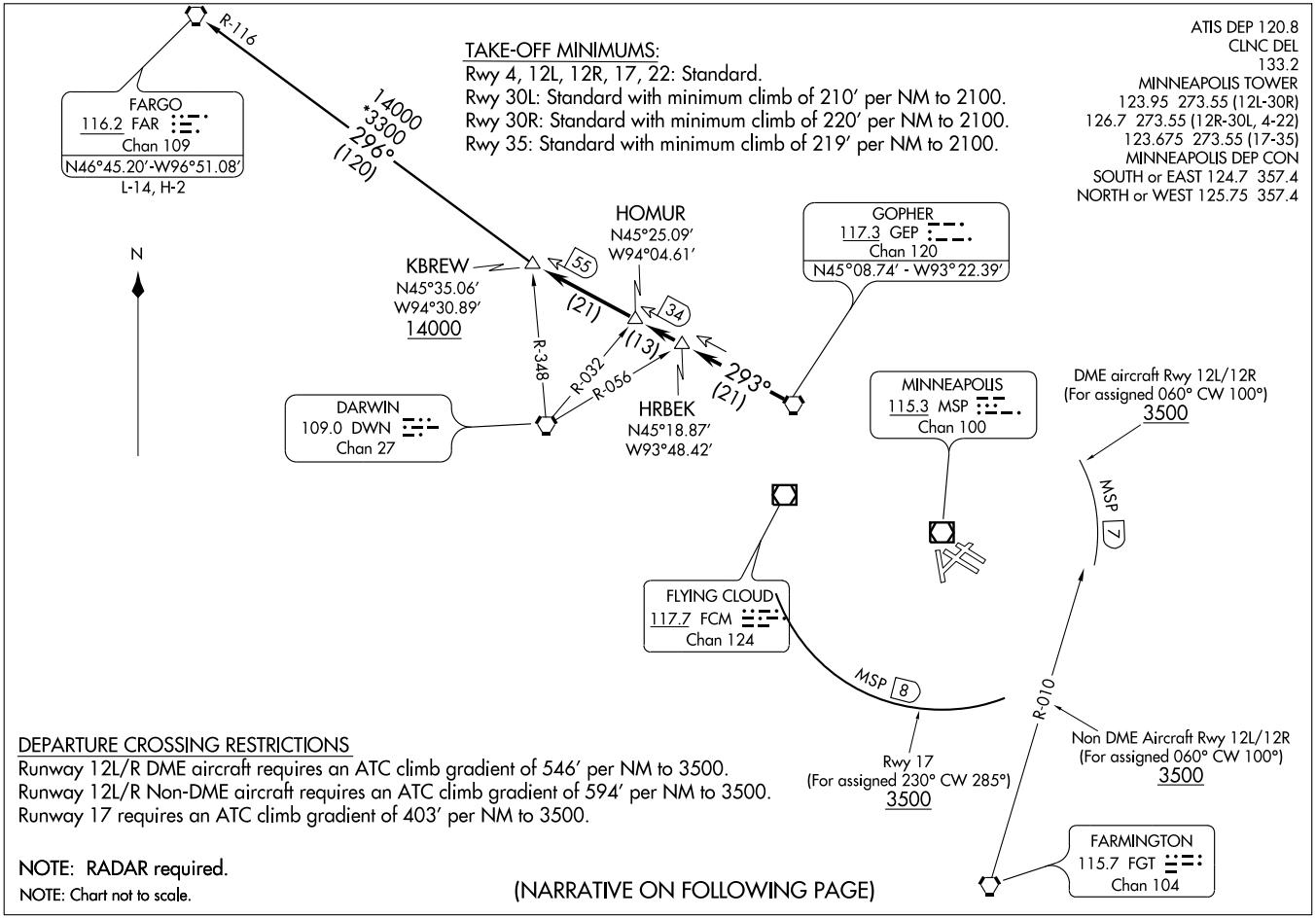
NC-1, 21 OCT 2010 to 18 NOV 2010

KBREW THREE DEPARTURE

(KBREW3.KBREW) 10098

MINNEAPOLIS-ST. PAUL INTL/WOLD-CHAMBERLAIN (MSP)

MINNEAPOLIS, MINNESOTA



KBREW THREE DEPARTURE
(KBREW3.KBREW) 10098
MINNEAPOLIS-ST. PAUL INTL/WOLD-CHAMBERLAIN (MSP)
MINNEAPOLIS, MINNESOTA

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Fly assigned heading for radar vectors to GEP VORTAC then via GEP R-293 to KBREW INT/GEP 55 DME. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude.

DME EQUIPPED AIRCRAFT RWY 12L/12R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

NON DME EQUIPPED AIRCRAFT RWY 12L/12R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAYS 4, 22, 30L/R, 35: Initially assigned heading, thence . . . .

TAKE-OFF RUNWAY 17: For assigned heading 230° clockwise to 285° cross MSP 8 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

FARGO TRANSITION (KBREW3.FAR): From over KBREW INT via FAR R-116 to FAR VORTAC.

TAKE-OFF OBSTACLE NOTES:

RWY 4: Multiple trees beginning 800′ from DER, 264′ left of centerline, up to 75′ AGL/921′ MSL.
Rod on building 2528′ from DER, 1175′ left of centerline, 78′ AGL/922′ MSL.
Fence 803′ from DER, 585′ left of centerline, 15′ AGL/860′ MSL.
Antenna on OL building 456′ from DER, 319′ left of centerline, 13′ AGL/850′ MSL.
Light poles 1932′ from DER, 718′ left of centerline, 45′ AGL/885′ MSL.
Stack 4535′ from DER, 481′ left of centerline, 139′ AGL/949′ MSL.

RWY 12R: Multiple trees beginning 1477′ from DER, 407′ left of centerline, up to 86′ AGL/851MSL.
Multiple trees beginning 1426′ from DER, 124′ right of centerline, up to 111′AGL/847′ MSL.
Light pole 1408′ from DER, 746′ right of centerline, 85′ AGL/843′ MSL.
Radar reflector 983′ from DER, 32′ left of centerline, 15′ AGL/829′ MSL.
Pipe on building 826′ from DER, 576′ left of centerline, 10′ AGL/825′ MSL.
OL on LOC 766′ from DER, on centerline, 7′ AGL/821′ MSL.

RWY 22: Tree 2906′ from DER, 833′ right of centerline, 94′ AGL/934′ MSL.
Hopper 1717′ from DER, 456′ left of centerline, 48′ AGL/888′ MSL.

RWY 30L: Multiple trees beginning 1113′ from DER, 701′ left of centerline , up to 80′ AGL/919′ MSL.
Tree 1230′ from DER, 633′ right of centerline, 30′ AGL/877′ MSL.
Ground 28′ from DER, 490′ right of centerline, 0′ AGL/844′ MSL.

RWY 17: Antenna 1272′ from DER, 562′ right of centerline, 57′ AGL/891′ MSL.
Pole 409′ from DER, 530′ right of centerline, 29′ AGL/866′ MSL.
Wind direction indicator on building 2619′ from DER, 881′ left of centerline, 97′ AGL/918′ MSL.
Building 2619′ from DER, 859′ left of centerline, 84′ AGL/905′ MSL.
Light 1176′ from DER, 291′ right of centerline, 11′ AGL/875′ MSL.
Tree 2619′ from DER, on centerline , 79′ AGL/900′ MSL.

RWY 30R: Building 1056′ from DER, 198′ left of centerline, 13′ AGL/853′ MSL.
Multiple trees beginning 3010′ from DER, 334′ left of centerline, up to 94′ AGL/940′ MSL.
Light pole 1849′ from DER, 698′ right of centerline, 17′ AGL/871′ MSL.
Fence 1327′ from DER, 667′ right of centerline, 8′ AGL/ 857′ MSL.
Tree 3703′ from DER, 350′ right of centerline, 67′ AGL/ 914′ MSL.
Rod on pole 3143′ from DER, 47′ right of centerline, 38′ AGL/898′ MSL.

RWY 35: Tree 175′ from DER, 398′ right of centerline, 73′ AGL/883′ MSL.
Multiple trees beginning 1989′ from DER, 351′ left of centerline, up to 65′ AGL/902′ MSL.
Multiple buildings beginning 5.5 NM from DER, 1787′ left of centerline, up to 811′ AGL/1743′ MSL.

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LAND AND HOLD SHORT OPERATIONS (LAHSO)

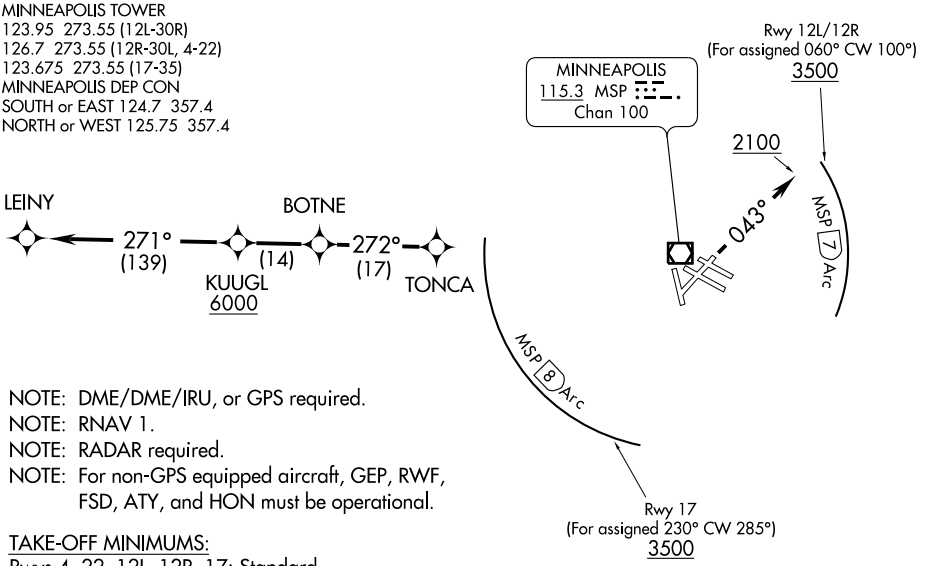
LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	MEASURED DISTANCE
DULUTH, MN			
DULUTH INTL (DLH)	09	03-21	8,950 feet
GRAND FORKS, ND			
GRAND FORKS INTL (GFK)	27R	17R-35L	3,000 feet
	35L	09L-27R	4,600 feet
MINNEAPOLIS, MN			
MINNEAPOLIS-ST PAUL INTL/			
WOLD-CHAMBERLAIN (MSP)	22	TWY K	8,550 feet
	30L	TWY A9 TWY W9	8,150 feet
ROCHESTER, MN			
ROCHESTER INTL (RST)	02	13-31	5,850 feet
	13	02-20	5,270 feet
	31	02-20	3,200 feet

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ATIS DEP 120.8
CLNC DEL
133.2
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH or EAST 124.7 357.4
NORTH or WEST 125.75 357.4



NOTE: DME/DME/IRU, or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: For non-GPS equipped aircraft, GEP, RWF, FSD, ATY, and HON must be operational.

TAKE-OFF MINIMUMS:
Rwys 4, 22, 12L, 12R, 17: Standard.
Rwy 35: Standard with minimum climb of 219' per NM to 2100.
Rwy 30L: Standard with minimum climb of 210' per NM to 2100.
Rwy 30R: Standard with minimum climb of 220' per NM to 2100.

DEPARTURE CROSSING RESTRICTIONS:
Runway 12L/R requires an ATC climb gradient of 546' per NM to 3500.
Runway 17 requires an ATC climb gradient of 403' per NM to 3500.

NOTE: Chart not to scale.

(NOTES CONTINUED ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 4: Climb heading 043° to 2100. Thence . . . .

TAKE-OFF RUNWAYS 12L/12R: For assigned headings from 060° clockwise to 100°, cross MSP VOR/DME 7 DME Arc at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAY 17: For assigned headings from 230° clockwise to 285°, cross MSP VOR/DME 8 DME Arc at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAYS 22, 35, 30L/R: Climb on assigned heading for radar vectors. Thence . . . .

. . . . expect radar vectors to TONCA, then via 272° track to BOTNE, then via 272° track to KUUGL, then via 271° to LEINY. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude until BOTNE. Expect filed altitude/flight level 10 minutes after departure. Cross KUUGL at or above 6000.

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TAKE-OFF OBSTACLE NOTES:

RWY 4: Multiple trees beginning 800′ from DER, 264′ left of centerline, up to 75′ AGL/921′ MSL.
Rod on building 2528′ from DER, 1175′ left of centerline, 78′ AGL/922′ MSL.
Fence 803′ from DER, 585′ left of centerline, 15′ AGL/860′ MSL.
Ant on OL building 456′ from DER, 319′ left of centerline, 13′ AGL/850′ MSL.
LT poles 1932′ from DER, 718′ left of centerline, 45′ AGL/885′ MSL.
Stack 4535′ from DER, 481′ left of centerline, 139′ AGL/949′ MSL.

RWY 22: Tree 2906′ from DER, 833′ right of centerline, 94′ AGL/934′ MSL.
Hopper 1717′ from DER, 456′ left of centerline, 48′ AGL/888′ MSL.

RWY30L: Multiple trees beginning 1113′ from DER, 701′ left of centerline, up to 80′ AGL/919′ MSL.
Tree 1230′ from DER, 633′ right of centerline, 30′ AGL/877′ MSL.
Ground 28′ from DER, 490′ right of centerline, 0′ AGL/844′ MSL.

RWY 17: Antenna 1272′ from DER, 562′ right of centerline, 57′ AGL/891′ MSL.
Pole 409′ from DER, 530′ right of centerline, 29′ AGL/866′ MSL.
Wind direction indicator on bldg 2619′ from DER, 881′ left of centerline, 97′ AGL/918′ MSL.
Bldg 2619′ from DER, 859′ left of centerline, 84′ AGL/905′ MSL.
LT 1176′ from DER, 291′ right of centerline, 11′ AGL/875′ MSL.
Tree 2619′ from DER, on centerline, 79′ AGL/900′ MSL.

RWY 30R: Bldg 1056′ from DER, 198′ left of centerline, 13′ AGL/853′ MSL.
Multiple trees beginning 3010′ from DER, 334′ left of centerline, up to 94′ AGL/940′ MSL.
LT pole 1849′ from DER, 698′ right of centerline, 17′ AGL/871′ MSL.
Fence 1327′ from DER, 667′ right of centerline, 8′ AGL/857′ MSL.
Tree 3703′ from DER, 350′ right of centerline, 67′ AGL/914′ MSL.
Rod on pole 3143′ from DER, 47′ right of centerline, 38′ AGL/898′ MSL.

RWY 35: Tree 175′ from DER, 398′ right of centerline, 73′ AGL/883′ MSL.
Multiple trees beginning 1989′ from DER, 351′ left of centerline, up to 65′ AGL/902′ MSL.
Multiple buildings beginning 5.5 NM from DER, 1787′ left of centerline, up to 811′ AGL/1743′ MSL.

RWY12R: Multiple trees beginning 1477′ from DER, 407′ left of centerline, up to 86′ AGL/851′ MSL.
Multiple trees beginning 1426′ from DER, 124′ right of centerline, up to 111′ AGL/847′ MSL.
LT pole 1408′ from DER, 746′ right of centerline, 85′ AGL/843′ MSL.
Radar reflector 983′ from DER, 32′ left of centerline, 15′ AGL/829′ MSL.
Pipe on bldg, 826′ from DER, 576′ left of centerline, 10′ AGL/825′ MSL.
OL on LOC 766′ from DER, on centerline, 7′ AGL/821′ MSL.

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LOC I-APL	APP CRS	Rwy Idg	9456
109.3	044°	TDZE	832
		Apt Elev	841

LOC RWY 4

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

For inoperative MALSR, increase S-4 Cat E visibility to 1¾ mile.

MALSR

MISSED APPROACH: Climb to 1500 then climbing left turn to 4000 direct GEP VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	119.3 335.5	123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22) 123.675 273.55 (17-35)	N 121.8 348.6 S 121.9 348.6 W 127.925	133.2

MISSED APCH FIX

R-297 297° 17°

GOPHER
117.3 GEP
Chan 120

117.3 GEP
Chan 120

10 NM

R-178

R-166

2438

1549

1743 1539

1230

1290

1040 1144

1085± 1006

949

1110 ±

1192 1033 932

1042

1060

1305

IGEPY INT

986

2300

044°
(6.4)

(IF)
KETAM
INT

LOCALIZER 109.3
I-APL

MSA GEP 25 NM
3500
090°
2700
360°

Procedure NA
for arrivals at LYDIA
on V505 southbound.

(UYETI)

224°

*4000 to KETAM
358° (5.4) and LOC (4.3)

(IAF)
LYDIA

* 2700 when assigned by ATC

ELEV 841 D

HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

950± 996 906± 859±

8000 X 150
0.3% DOWN
11,006 X 150
10,000 X 200
0.3% DOWN

TDZE
832

044° 4.3 NM
from FAF

VGSI and descent angles not coincident.

1500 4000 GEP 117.3

Procedure Turn
NA

KETAM
INT

IGEPY
INT

*4000

044°

3.08°
TCH 55

2300

*2700 when assigned
by ATC

6.4 NM 4.3 NM

CATEGORY	A	B	C	D	E
S-4	1340/24	508 (500-½)	1340/50	508 (500-1)	1340/60 508 (500-1¼)
CIRCLING	1360-1	519 (600-1)	1360-1½ 519 (600-1½)	1460-2 619 (700-2)	1660-3 819 (900-3)

FAF to MAP 4.3 NM					
Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

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LOC/DME I-TJZ	APP CRS	Rwy Idg	8000
110.95	169°	TDZE	840
Chan 46 (Y)		Apt Elev	841

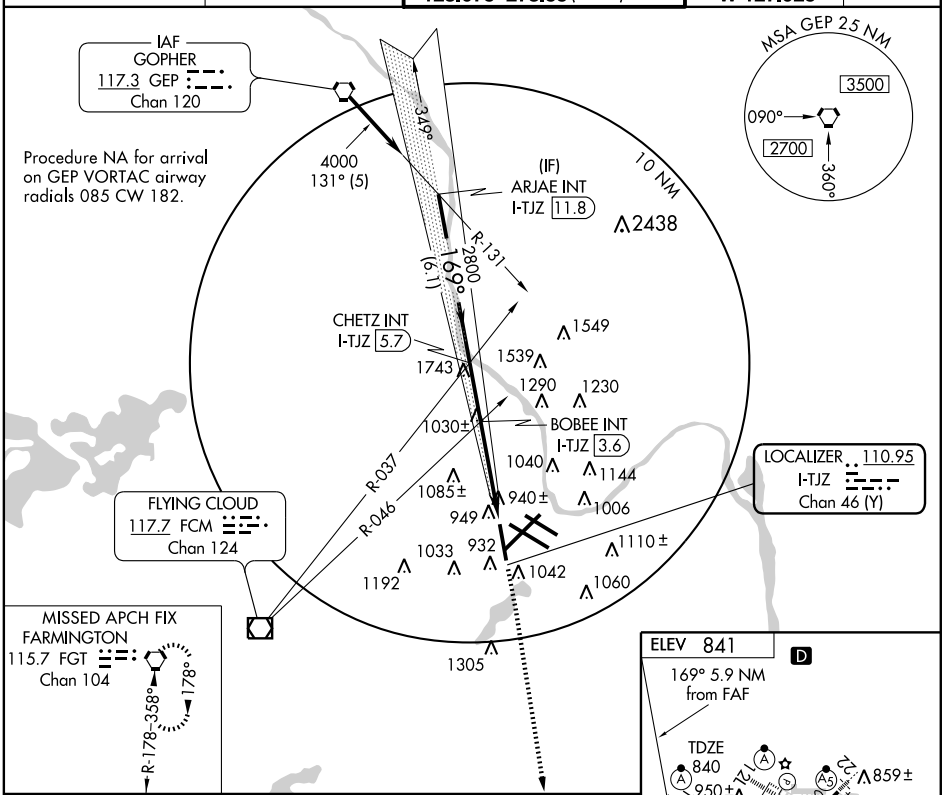
LOC RWY 17

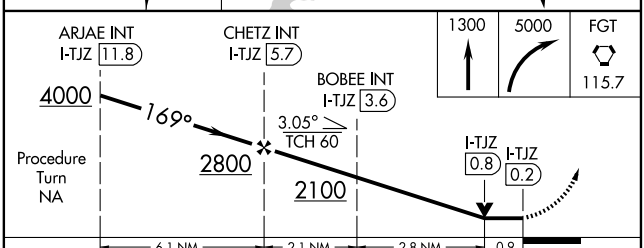
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

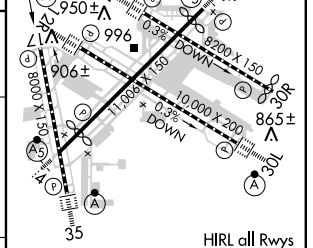
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 1300 then climbing right turn to 5000 direct FGT VORTAC and hold, continue climb-in-hold to 5000.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	119.3 335.5	123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22) 123.675 273.55 (17-35)	N 121.8 348.6 S 121.9 348.6 W 127.925	133.2







CATEGORY	A	B	C	D
S-17	1200/50 360 (400-1)			1200/60 360 (400-1¼)
CIRCLING	1360-1 519 (600-1)		1360-1½ 519 (600-1½)	1460-2 619 (700-2)

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC I-SIJ	APP CRS	Rwy Idg	10018
110.5	224°	TDZE	828
		Apt Elev	841

LOC RWY 22

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

For inoperative MALSR increase S-22 Cat A and B visibility to RVR 5000 and Cat E visibility to 2 miles. Visiblity reduction by helicopters NA.

MALSR

MISSED APPROACH: Climb to 2000 then climbing right turn to 4000 direct FCM VOR/DME and hold, continue climb-in-hold to 4000.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	119.3 335.5	123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22) 123.675 273.55 (17-35)	N 121.8 348.6 S 121.9 348.6 W 127.925	133.2

GOPHER 117.3 GEP Chan 120

Procedure NA for arrivals at WAGNR on V13 northbound.

R-110 R-131

2438 (IAF) WAGNR 044°

*4000 to CUSAC 174° (0.7) and LOC (1.6)

SNELL OM/INT RADAR

1549 2500 224° (6) (XUGVE)

(IF) CUSAC INT

*2600 when assigned by ATC

1743 1539 1230 1290 1169± 1224 1040 1085± 1144 949 1006 1033 932 1110± 1192 1042 1060 1305

10 NM

ALTERNATE MISSED APPROACH FIX LYDIA GEP 32.6

115.7 FGT Chan 104 R-258 002° 182° R-182

117.3 GEP Chan 120

FLYING CLOUD 117.7 FCM Chan 124

R-265-085° 265°

LOCALIZER 110.5 I-SIJ

MSA GEP 25 NM

3500 090° 2700 360°

ELEV 841 D

224° 5.2 NM from FAF

950± 996 906± 859± TDZE 828 865± 35

8200 X 150 0.3% DOWN

11,000 X 150 0.3% DOWN

10,000 X 200

HIRL all Rwys

REIL Rwys 17 and 30R

TDZ/CL Rwys 12L, 12R, 30L, and 35

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

2000 4000 FCM 117.7

SNELL OM/INT RADAR

CUSAC INT

Procedure Turn NA

*4000

224°

*2600 when assigned by ATC

2.90° TCH 61

2500

5.2 NM 6 NM

CATEGORY	A	B	C	D	E
S-22	1420/40	592 (600-¾)	1420/50 592 (600-1)	1420/60 592 (600-1¼)	1420-1½ 592 (600-1½)
CIRCLING	1420-1	579 (600-1)	1420-1½ 579 (600-1½)	1460-2 619 (700-2)	1660-3 819 (900-3)

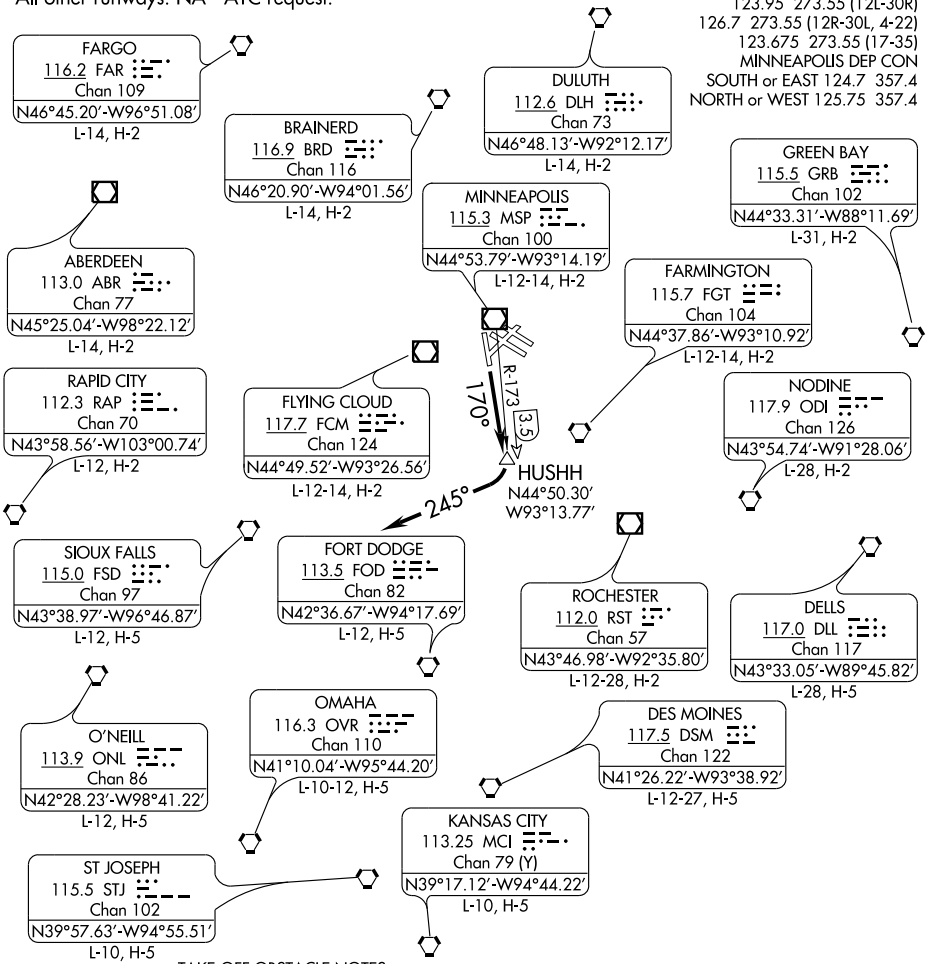
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NC-1, 21 OCT 2010 to 18 NOV 2010

MEADOW LAKE ONE DEPARTURE

SL-264 (FAA) MINNEAPOLIS, MINNESOTA

TAKEOFF MINIMUMS:
Rwy 17: Standard with minimum ATC climb of 240′ per mile to 5000.
All other runways: NA - ATC request.

ATIS DEP 120.8
CLNCL DEL 133.2
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH or EAST 124.7 357.4
NORTH or WEST 125.75 357.4



TAKE-OFF OBSTACLE NOTES

RWY 17: Building 199′ from DER, 496′ left of centerline, 67′ AGL/898′ MSL.
Multiple poles beginning 188′ from DER, 240′ right of centerline, up to 160′ AGL/866′ MSL.
Wind direction indicator on building 2619′ from DER, 881′ left of centerline, 97′ AGL/918′ MSL.
Building 2619′ from DER, 859′ left of centerline, 84′ AGL/905′ MSL.
Building 2336′ from DER, 385′ right of centerline, 154′ AGL/983′ MSL.

NOTE: RADAR required.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 17: Climb via 170° to HUSHH/MSP VOR/DME 3.5 DME then right turn via 245° and continue climb (turbojet aircraft maintain 7000 or lower as assigned, all other aircraft maintain 5000 or lower as assigned). Then via vectors to assigned route/fix, expect clearance to assigned altitude/flight level 10 minutes after departure.

MEADOW LAKE ONE DEPARTURE MINNEAPOLIS, MINNESOTA
(MEDOW1.MSP) 10098 MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

NC-1, 21 OCT 2010 to 18 NOV 2010
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MINNEAPOLIS FOUR DEPARTURE

SL-264 (FAA) MINNEAPOLIS, MINNESOTA

ATIS DEP 120.8
CLNC DEL
133.2
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH or EAST 124.7 357.4
NORTH or WEST 125.75 357.4

FARGO
116.2 FAR
Chan 109
N46°45.20′-W96°51.08′
L-14, H-2

DULUTH
112.6 DLH
Chan 73
N46°48.13′-W92°12.17′
L-14, H-2

BRAINERD
116.9 BRD
Chan 116
N46°20.89′-W94°01.55′
L-14, H-2

GREEN BAY
115.5 GRB
Chan 102
N44°33.31′-W88°11.69′
L-31, H-2

ABERDEEN
113.0 ABR
Chan 77
N45°25.04′-W98°22.12′
L-14, H-2

FLYING CLOUD
117.7 FCM
Chan 124

MINNEAPOLIS
115.3 MSP
Chan 100

MSP 8

MSP 7

DME aircraft Rwy 12L/12R
(For assigned 060° CW 100°)
3500

RAPID CITY
112.3 RAP
Chan 70
N43°58.56′-W103°00.74′
L-12, H-2

Rwy 17
(For assigned 230° CW 285°)
3500

R-010

Non DME Aircraft
Rwy 12L/12R
(For assigned 060° CW 100°)
3500

NODINE
117.9 ODI
Chan 126
N43°54.74′-W91°28.05′
L-28, H-2

FARMINGTON
115.7 FGT
Chan 104

SIOUX FALLS
115.0 FSD
Chan 97
N43°38.97′-W96°46.87′
L-12, H-5

FORT DODGE
113.5 FOD
Chan 82
N42°36.67′-W94°17.69′
L-12, H-5

ROCHESTER
112.0 RST
Chan 57
N43°46.97′-W92°35.82′
L-12-28, H-2

DELLS
117.0 DLL
Chan 117
N43°33.05′-W89°45.82′
L-28, H-5

O'NEILL
113.9 ONL
Chan 86
N42°28.23′-W98°41.22′
L-12, H-5

OMAHA
116.3 OVR
Chan 110
N41°10.04′-W95°44.20′
L-10-12, H-5

DES MOINES
117.5 DSM
Chan 122
N41°26.22′-W93°38.92′
L-12-27, H-5

ST JOSEPH
115.5 STJ
Chan 102
N39°57.63′-W94°55.51′
L-10, H-5

KANSAS CITY
113.25 MCI
Chan 79 (Y)
N39°17.12′-W94°44.22′
L-10, H-5

TAKE-OFF MINIMUMS:
Rwy 4, 12L, 12R, 17, 22: Standard.
Rwy 30L: Standard with minimum climb of 210′ per NM to 2100.
Rwy 30R: Standard with minimum climb of 220′ per NM to 2100.
Rwy 35: Standard with minimum climb of 219′ per NM to 2100.

NOTE: Runway 12L/R DME aircraft minimum ATC climb of 546′ per NM to 3500.
NOTE: Runway 12L/R Non-DME aircraft minimum ATC climb of 594′ per NM to 3500.
NOTE: Runway 17 minimum ATC climb of 403′ per NM to 3500.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: RADAR Required.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

ALL AIRCRAFT: Expect radar vectors to join filed/assigned route. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude. Expect clearance to assigned altitude/flight level 10 (ten) minutes after departure.

DME EQUIPPED AIRCRAFT RWY 12L/12R DEPARTURES: For assigned heading from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure.

NON-DME EQUIPPED AIRCRAFT RWY 12L/12R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure.

TAKE-OFF RUNWAY 17: For assigned headings from 230° clockwise to 285° cross MSP 8 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure.

TAKE-OFF OBSTACLE NOTES:

RWY 4: Multiple trees beginning 800′ from DER, 264′ left of centerline, up to 75′ AGL/921′ MSL.
Rod on building 2528′ from DER, 1175′ left of centerline, 78′ AGL/922′ MSL.
Fence 803′ from DER, 585′ left of centerline, 15′ AGL/860′ MSL.
Antenna on OL building 456′ from DER, 319′ left of centerline, 13′ AGL/850′ MSL.
Light poles 1932′ from DER, 718′ left of centerline, 45′ AGL/885′ MSL.
Stack 4535′ from DER, 481′ left of centerline, 139′ AGL/949′ MSL.

RWY 22: Tree 2906′ from DER, 833′ right of centerline, 94′ AGL/934′ MSL.
Hopper 1717′ from DER, 456′ left of centerline, 48′ AGL/888′ MSL.

RWY 17: Antenna 1272′ from DER, 562′ right of centerline, 57′ AGL/891′ MSL.
Pole 409′ from DER, 530′ right of centerline, 29′ AGL/866′ MSL.
Wind direction indicator on building 2619′ from DER, 881′ left of centerline, 97′ AGL/918′ MSL.
Building 2619′ from DER, 859′ left of centerline, 84′ AGL/905′ MSL.
Light 1176′ from DER, 291′ right of centerline, 11′ AGL/875′ MSL.
Tree 2619′ from DER, on centerline, 79′ AGL/900′ MSL.

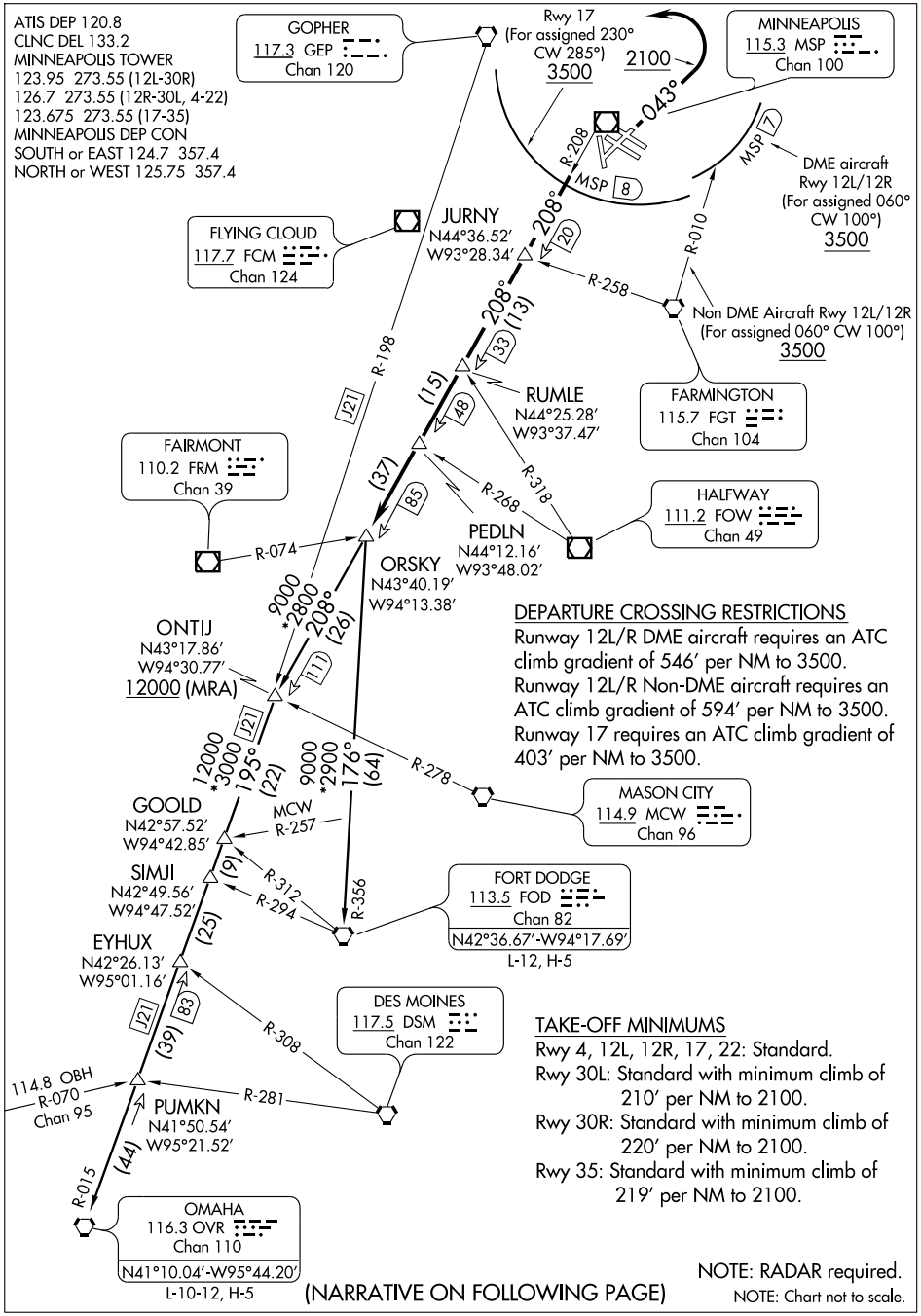
RWY 30L: Multiple trees beginning 1113′ from DER, 701′ left of centerline , up to 80′ AGL/919′ MSL.
Tree 1230′ from DER, 633′ right of centerline, 30′ AGL/877′ MSL.
Ground 28′ from DER, 490′ right of centerline 0′ AGL/844′ MSL.

RWY 30R: Building 1056′ from DER, 198′ left of centerline, 13′ AGL/853′ MSL.
Multiple trees beginning 3010′ from DER, 334′ left of centerline, up to 94′ AGL/940′ MSL.
Light pole 1849′ from DER, 698′ right of centerline, 17′ AGL/871′ MSL.
Fence 1327′ from DER, 667′ right of centerline, 8′ AGL/857′ MSL.
Tree 3703′ from DER, 350′ right of centerline, 67′ AGL/914′ MSL.
Rod on pole 3143′ from DER, 47′ right of centerline, 38′ AGL/898′ MSL.

RWY 35: Tree 175′ from DER, 398′ right of centerline, 73′ AGL/883′ MSL.
Multiple trees beginning 1989′ from DER, 351′ left of centerline, up to 65′ AGL/902′ MSL.
Multiple buildings beginning 5.5 NM from DER, 1787′ left of centerline, up to 811′ AGL/1743′ MSL.

RWY 12R: Multiple trees beginning 1477′ from DER, 407′ left of centerline, up to 86′ AGL/851′ MSL.
Multiple trees beginning 1426′ from DER, 124′ right of centerline, up to 111′ AGL/847′ MSL.
Light pole 1408′ from DER, 746′ right of centerline, 85′ AGL/843′ MSL.
Radar reflector 983′ from DER, 32′ left of centerline, 15′ AGL/829′ MSL.
Pipe on building, 826′ from DER, 576′ left of centerline, 10′ AGL/825′ MSL.
OL on LOC 766′ from DER, on centerline, 7′ AGL/821′ MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010



(NARRATIVE ON FOLLOWING PAGE)

NC-1, 21 OCT 2010 to 18 NOV 2010

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Fly assigned heading for radar vectors to MSP R-208 to ORSKY INT/MSP 85 DME. Turbojet aircraft maintain 7000 or lower assigned altitude. All other aircraft maintain 5000 or lower assigned altitude.

TAKE-OFF RUNWAY 17: For assigned headings from 230° clockwise to 285° cross MSP 8 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence. . . .

DME EQUIPPED AIRCRAFT RWY 12L/R: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence. . . .

NON DME EQUIPPED AIRCRAFT RWY 12L/R: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence. . . .

TAKE-OFF RUNWAY 4: Climb heading 043° to 2100 before turning left.

TAKE-OFF RUNWAYS 22, 30L/R, 35: Initially assigned heading, Thence. . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

FORT DODGE TRANSITION (ORSKY4.FOD): From over ORSKY INT via FOD R-356 to FOD VORTAC.

OMAHA TRANSITION (ORSKY4.OVR): From over ORSKY INT via MSP R-208 to ONTIJ INT then via OVR R-015 to OVR VORTAC.

TAKE-OFF OBSTACLE NOTES

RWY 4: Multiple trees beginning 800′ from DER, 264′ left of centerline, up to 75′ AGL/921′ MSL.
Rod on building 2528′ from DER, 1175′ left of centerline, 78′ AGL/922′ MSL.
Fence 803′ from DER, 585′ left of centerline, 15′ AGL/860′ MSL.
Antenna on OL building 456′ from DER, 319′ left of centerline, 13′ AGL/850′ MSL.
Light poles 1932′ from DER, 718′ left of centerline, 45′ AGL/885′ MSL.
Stack 4535′ from DER, 481′ left of centerline, 139′ AGL/949′ MSL.
Hopper 1717′ from DER, 456′ left of centerline, 48′ AGL/888′ MSL.

RWY 12R: Multiple trees beginning 1477′ from DER, 407′ left of centerline, up to 86′ AGL/851′ MSL.
Multiple trees beginning 1426′ from DER, 124′ right of centerline, up to 111′ AGL/847′ MSL.
Light pole 1408′ from DER, 746′ right of centerline, 85′ AGL/843′ MSL.
Radar reflector 983′ from DER, 32′ left of centerline, 15′ AGL/829′ MSL.
Pipe on building, 826′ from DER, 576′ left of centerline, 10′ AGL/825′ MSL.
OL on LOC 766′ from DER, on centerline, 7′ AGL/821′ MSL.

RWY 17: Antenna 1272′ from DER, 562′ right of centerline, 57′ AGL/891′ MSL.
Pole 409′ from DER, 530′ right of centerline, 29′ AGL/866′ MSL.
Wind direction indicator on building 2619′ from DER, 881′ left of centerline, 97′ AGL/918′ MSL.
Building 2619′ from DER, 859′ left of centerline, 84′ AGL/905′ MSL
Light 1176′ from DER, 291′ right of centerline, 11′ AGL/875′ MSL.
Tree 2619′ from DER, on centerline, 79′ AGL/900′ MSL.

RWY 22: Tree 2906′ from DER, 833′ right of centerline, 94′ AGL/934′ MSL.

RWY 30L: Multiple trees beginning 1113′ from DER, 701′ left of centerline , up to 80′ AGL/919′ MSL.
Tree 1230′ from DER, 633′ right of centerline, 30′ AGL/877′ MSL.
Ground 28′ from DER, 490′ right of centerline 0′ AGL/844′ MSL.

RWY 30R: Building 1056′ from DER, 198′ left of centerline, 13′ AGL/853′ MSL.
Multiple trees beginning 3010′ from DER, 334′ left of centerline, up to 94′ AGL/940′ MSL.
Light pole 1849′ from DER, 698′ right of centerline, 17′ AGL/871′ MSL.
Fence 1327′ from DER, 667′ right of centerline, 8′ AGL/857′ MSL.
Tree 3703′ from DER, 350′ right of centerline, 67′ AGL/914′ MSL.
Rod on pole 3143′ from DER, 47′ right of centerline, 38′ AGL/898′ MSL.

RWY 35: Tree 175′ from DER, 398′ right of centerline, 73′ AGL/883′ MSL.
Multiple trees beginning 1989′ from DER, 351′ left of centerline, up to 65′ AGL/902′ MSL.
Multiple buildings beginning 5.5 NM from DER, 1787′ left of centerline, up to 811′ AGL/1743′ MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 4

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

APP CRS	Rwy Idg	9456
043°	TDZE	832
	Apt Elev	841

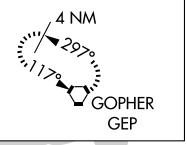
T A For inoperative MALSR, increase LNAV/VNAV and LNAV Cat. E visibility to 1¾.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
DME/DME RNP- 0.3 NA.

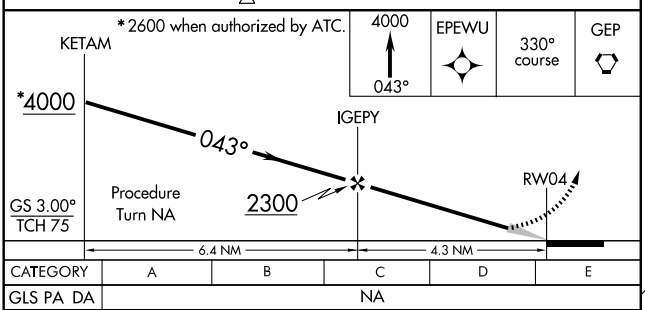
MALSR (A5)

MISSED APPROACH: Climb to 4000 via 043° course to EPEWU WP then via 330° course to GEP VORTAC and hold.

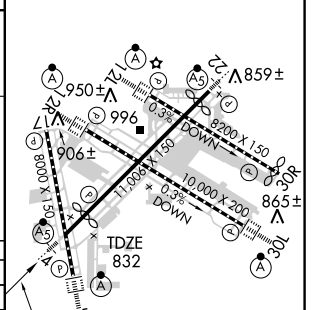
ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	119.3 335.5	123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22) 123.675 273.55 (17-35)	N 121.8 348.6 S 121.9 348.6 W 127.925	133.2

MISSED APCH FIX





CATEGORY	A	B	C	D	E
GLS PA DA	NA				
LNAV/VNAV DA	1296/50 464 (500-1)				
LNAV MDA	1300/24 468 (500-½)		1300/40 468 (500-¾)	1300/50 468 (500-1)	1300/60 468 (500-1¼)
CIRCLING	1360-1 519 (600-1)			1460-2 619 (700-2)	1660-3 819 (900-3)



HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	7620
CH 45525	119°	TDZE	839
W12B		Apt Elev	841

RNAV (GPS) RWY 12L

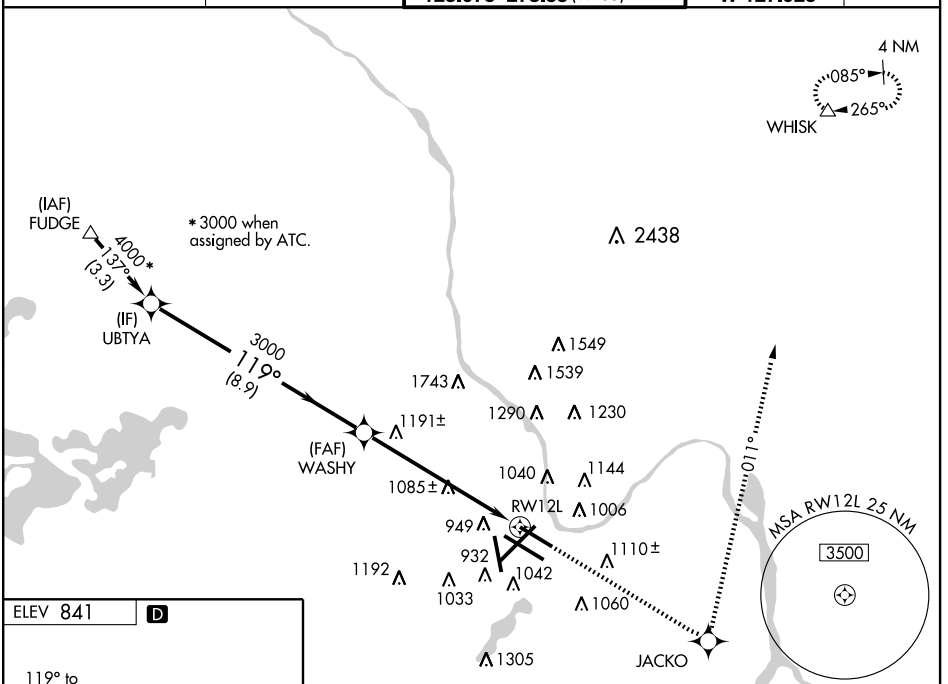
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

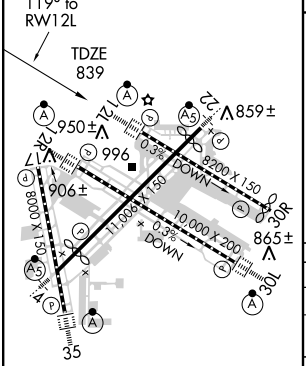
For inoperative ALSF, increase LPV Cat E visibility to RVR 4000, LNAV/VNAV Cat E visibility to 1½ mile and LNAV Cat E visibility to 2½ mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP- 0.3 NA.

ALSF-2

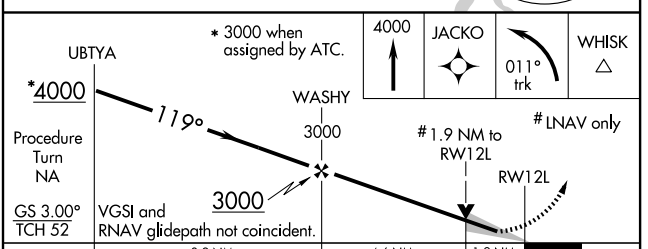
MISSED APPROACH: Climb to 4000 direct JACKO and left turn via track 011° to WHISK and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	





HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35



CATEGORY	A	B	C	D	E
LPV DA	1039/24 200 (200-½)				
LNAV/VNAV DA	1248/50 409 (500-1)				
LNAV MDA	1520/24 681 (700-½)		1520-1½ 681 (700-1½)	1520-1¾ 681 (700-1¾)	1520-2 681 (700-2)
CIRCLING	1520-1 679 (700-1)		1520-2 679 (700-2)	1520-2¼ 679 (700-2¼)	1660-3 819 (900-3)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	10000
CH 50125	119°	TDZE	841
W12A		Apt Elev	841

RNAV (GPS) RWY 12R

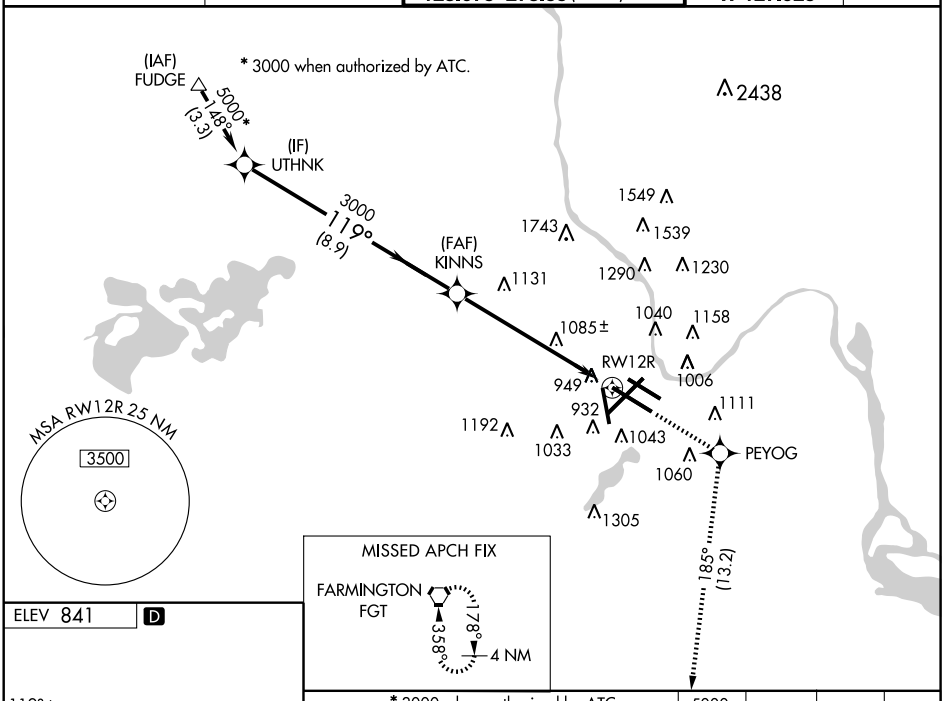
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

T A DME/DME RNP- 0.3 NA.
Baro-VNAV NA below -16°C (4°F).
For inoperative ALSF, increase LPV all Cats visibility to RVR 5000, increase LNAV/VNAV Cat E visibility to 1½, increase LNAV Cat E visibility to 2¼.

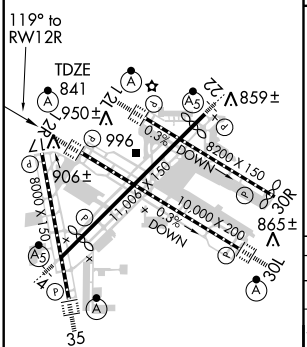
ALSF-2

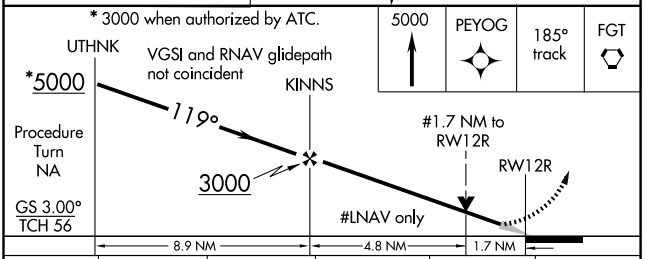
MISSED APPROACH: Climb to 5000 direct PEYOG and via 185° track to FGT VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	119.3 335.5	123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22) 123.675 273.55 (17-35)	N 121.8 348.6 S 121.9 348.6 W 127.925	133.2



ELEV 841 D





CATEGORY	A	B	C	D	E
LPV DA	1119/24 278 (300-½)				
LNAV/VNAV DA	1294/50 453 (500-1)				
LNAV MDA	1460/24 619 (700-½)		1460/60 619 (700-1¼)	1460-1½ 619 (700-1½)	1460-1¾ 619 (700-1¾)
CIRCLING	1460-1½ 619 (700-1½)		1460-1¾ 619 (700-1¾)	1460-2 619 (700-2)	1660-3 819 (900-3)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	10018
CH 60927	223°	TDZE	828
W22A		Apt Elev	841

RNAV (GPS) RWY 22

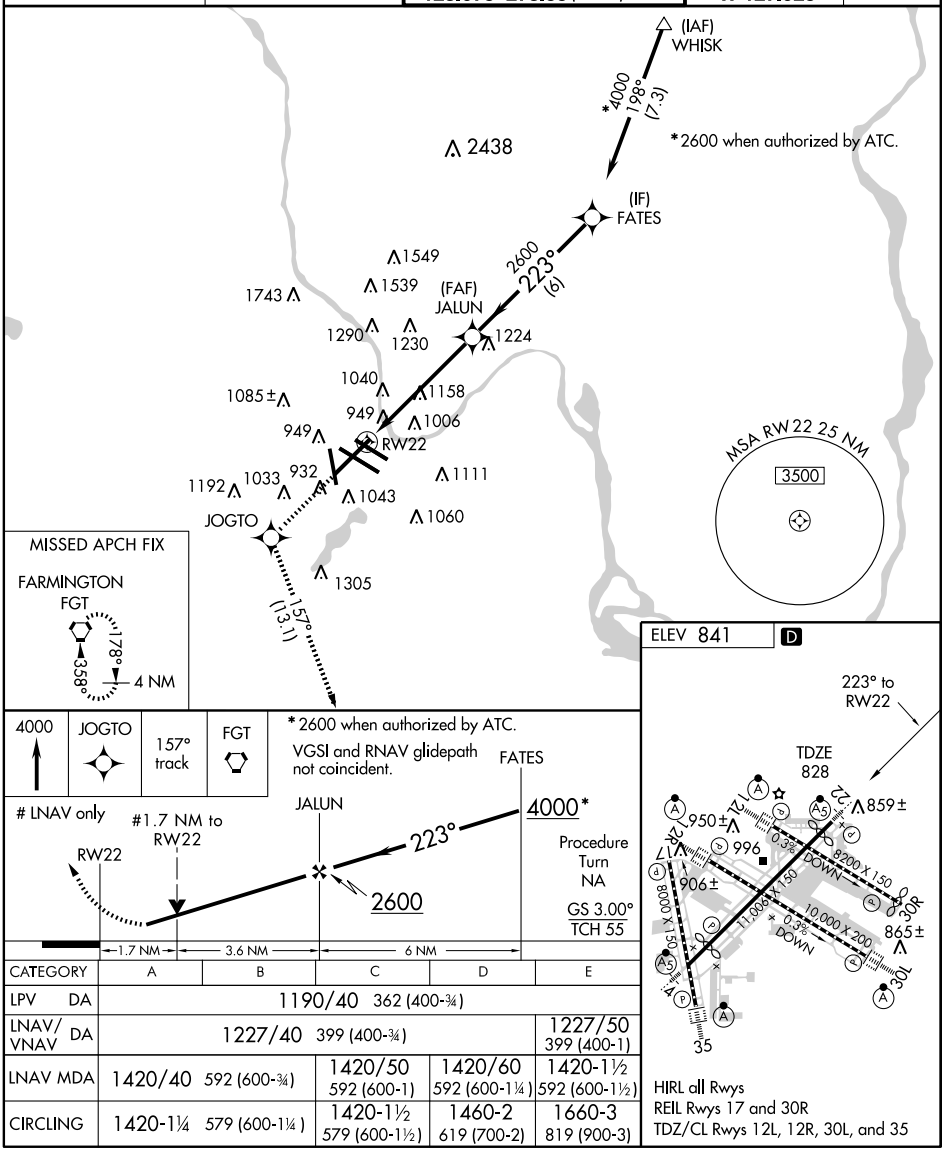
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

T A — DME/DME RNP- 0.3 NA.
Baro-VNAV NA below -16°C (4°F).
For inoperative MALSR, increase LPV all CATS visibility to RVR 6000, increase LNAV CAT A and B visibility to RVR 5000.

MALSR (A5)

MISSED APPROACH: Climb to 4000 direct JOGTO and via 157° track to FGT VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	



4000	JOGTO	157° track	FGT

*2600 when authorized by ATC.
VGSI and RNAV glidepath not coincident.

CATEGORY	A	B	C	D	E
LPV DA	1190/40 362 (400-¾)				
LNAV/VNAV DA	1227/40 399 (400-¾)				1227/50 399 (400-1)
LNAV MDA	1420/40 592 (600-¾)		1420/50 592 (600-1)	1420/60 592 (600-1¼)	1420-1½ 592 (600-1½)
CIRCLING	1420-1¼ 579 (600-1¼)		1420-1½ 579 (600-1½)	1460-2 619 (700-2)	1660-3 819 (900-3)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	10000
CH 56225	299°	TDZE	823
W30A		Apt Elev	841

RNAV (GPS) RWY 30L

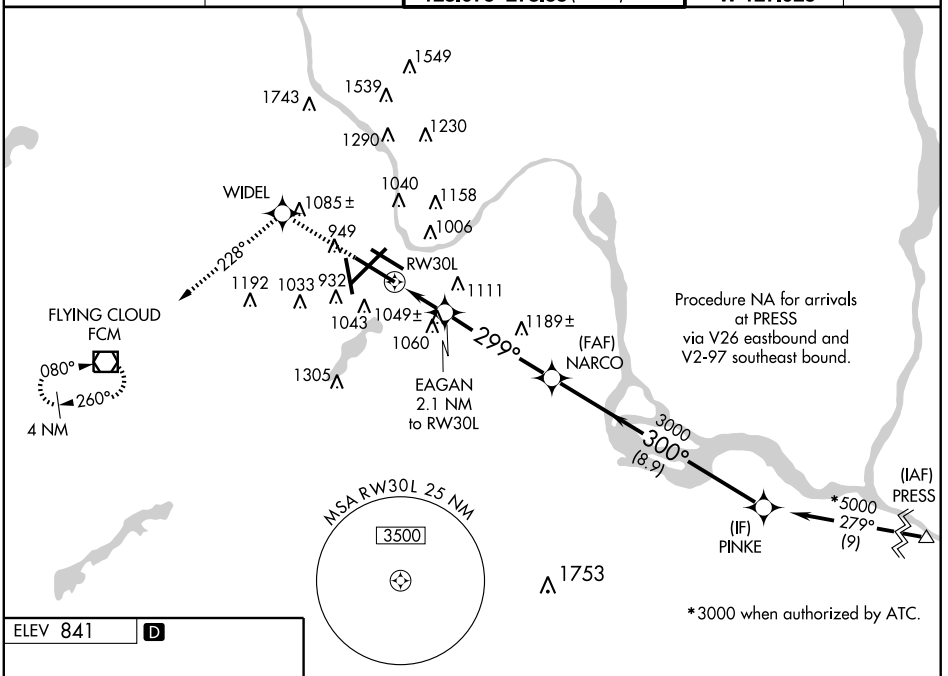
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

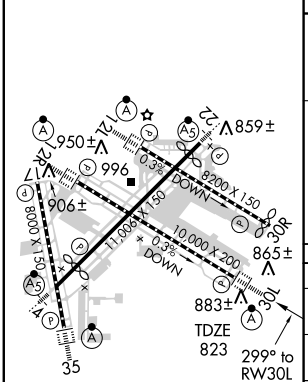
For inoperative ALSF, increase LPV all Cats visibility to RVR 4000, increase LNAV/VNAV Cat E visibility to 2, increase LNAV Cat E visibility to 2. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

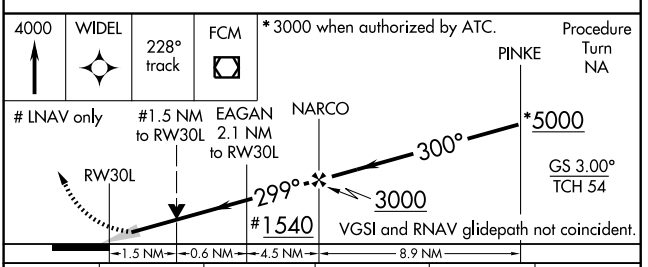
ALSF-2

MISSED APPROACH: Climb to 4000 direct WIDEL and via 228° track to FCM VOR/DME and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	







CATEGORY	A	B	C	D	E
LPV DA	1023/18 200 (200-½)				
LNAV/VNAV DA	1368-1½ 545 (600-1½)				
LNAV MDA	1360/24 537 (600-½)		1360/50 537 (600-1)	1360/60 537 (600-1¼)	1360-1½ 537 (600-1½)
CIRCLING	1360-1 519 (600-1)		1360-1½ 519 (600-1½)	1460-2 619 (700-2)	1660-3 819 (900-3)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	8000
CH 60925	299°	TDZE	823
W30B		Apt Elev	841

RNAV (GPS) RWY 30R

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

T A — DME/DME RNP- 0.3 NA. Baro-VNAV NA below -16°C (4°F).

MISSED APPROACH: Climb to 5000 direct FASRO and via 343° track to GEP VORTAC and hold.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275 DEP 120.8	119.3 335.5	123.95 273.55 (12L-30R) 126.7 273.55 (12R-30L, 4-22) 123.675 273.55 (17-35)	N 121.8 348.6 S 121.9 348.6 W 127.925	133.2

Procedure NA for arrivals at PRESS via V26 eastbound, V2-97 southeastbound.

MISSED APCH FIX

4 NM 297° 117° GOPHER GEP

343° (14)

1549 1539 1743 1230 1290 1040 1158 1006 1085± 949 1002± 932 1111 1192 1033 1043 1060 1305 1181± 1753

FASRO

RW30R

299°

(FAF) JACKO

3000 300° (8.9)

(IF) WULAM

4000* 282° (8.8)

(IAF) PRESS

*3000 when authorized by ATC.

MSA RW30R 25 NM 3500

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5000 | FASRO | 343° track | GEP

* 3000 when authorized by ATC.

VGSI and RNAV glidepath not coincident

LNAV only

#1.6 NM to RW30R

RW30R 299° 300° JACKO 3000 WULAM 4000*

Procedure Turn NA

GS 3.00° TCH 55

1.6 NM 5 NM 8.9 NM

CATEGORY	A	B	C	D	E
LPV DA	1073/40 250 (300-¾)				
LNAV/VNAV DA	1294-1¾ 471 (500-1¾)				
LNAV MDA	1400/50 577 (600-1)		1400-1½ 577 (600-1½)	1400-1¾ 577 (600-1¾)	1400-2 577 (600-2)
CIRCLING	1400-1 559 (600-1)		1400-1½ 559 (600-1½)	1460-2 619 (700-2)	1660-3 819 (900-3)

ELEV 841 D

950± 996 906± 859± 865± 0.3% DOWN 8200 X 150 11,000 X 150 10,000 X 200 TDZE 823 299° to RW30R

HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

WAAS	APP CRS	Rwy Idg	8000
CH 90128	348°	TDZE	834
W35A		Apt Elev	841

RNAV (GPS) Z RWY 35

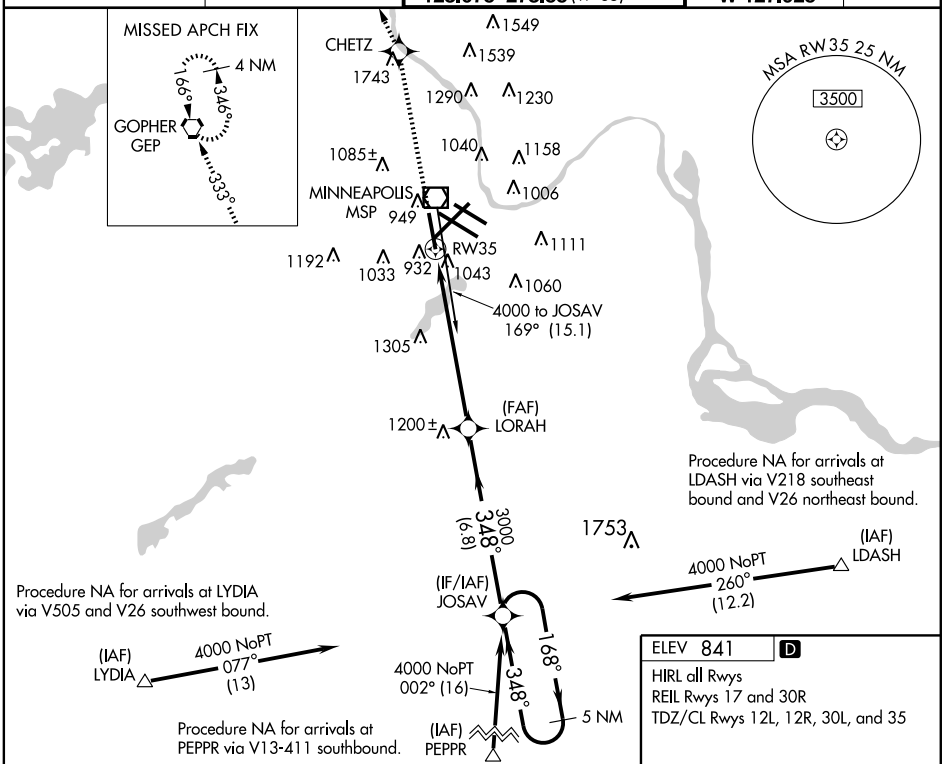
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

For inoperative ALSF increase LPV visibility to RVR 4000.
Baro-VNAV NA below -13°C (8°F).
DME/DME RNP-0.3 NA

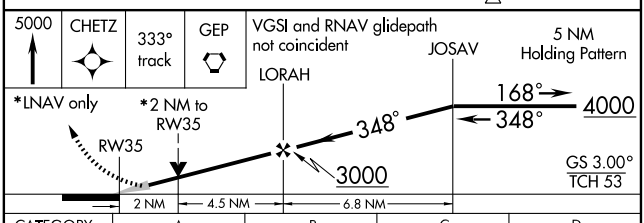
ALSF-2

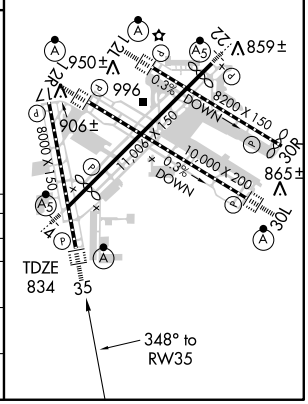
MISSED APPROACH: Climb to 5000 direct CHETZ and via 333° track to GOPHER VORTAC and hold, continue climb-in-hold to 5000.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	



ELEV 841 D
HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35





CATEGORY	A	B	C	D
LPV DA	1084/24 250 (300-½)			
LNAV/VNAV DA	1341/60 507 (500-1¼)			
LNAV MDA	1540/24 706 (700-½)		1540-1½ 706 (700-1½)	1540-1¾ 706 (700-1¾)
CIRCLING	1540-1 699 (700-1)		1540-2 699 (700-2)	1540-2¼ 699 (700-2¼)

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APP CRS	Rwy Idg	8000
348°	TDZE	834
	Apt Elev	841

RNAV (RNP) Y RWY 35

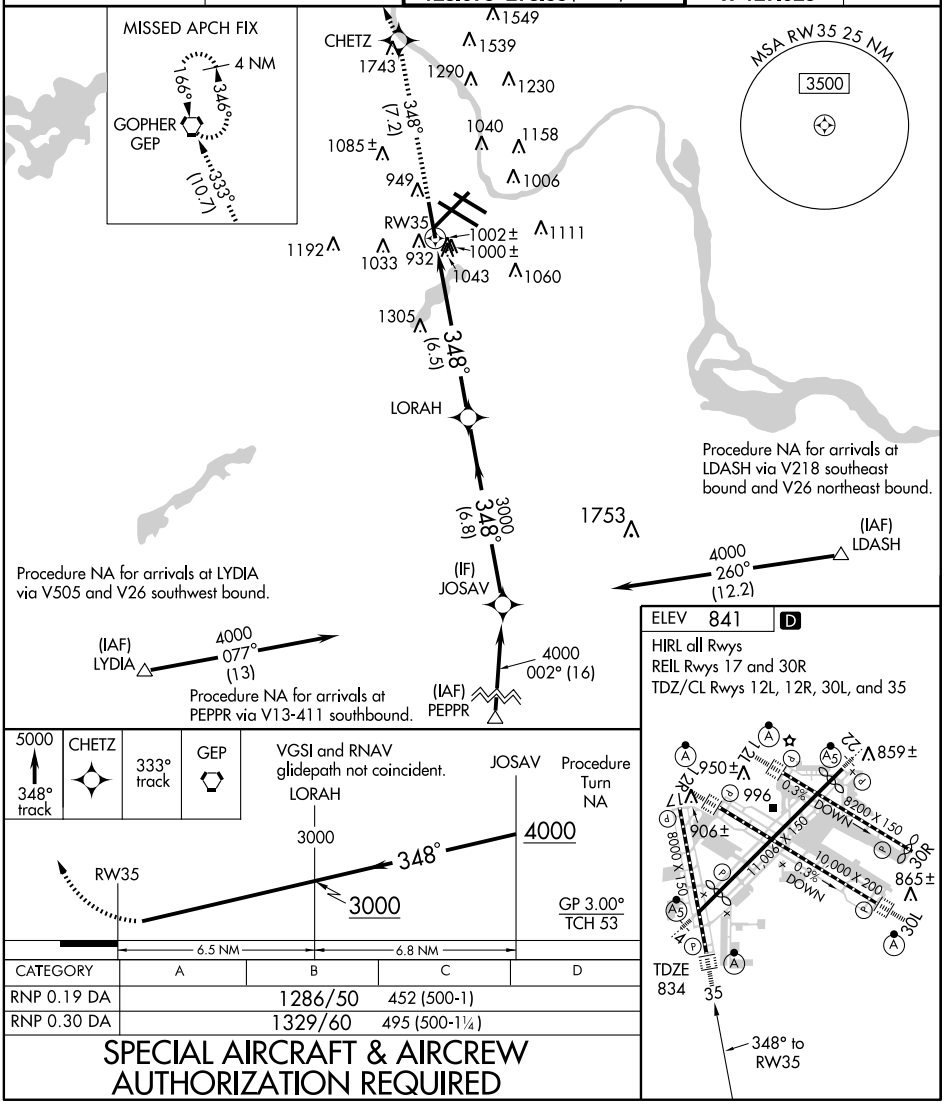
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

T NA — Visibility reduction by helicopters NA. When VGSI inop, procedure NA at night. GPS required. For uncompensated Baro-VNAV systems, procedure NA below -13°C (8°F) or above 47°C (117°F). For inoperative ALSF, increase RNP 0.19 visibility to 1½ and RNP 0.30 visibility to 1¾.

ALSF-2

MISSED APPROACH: Climb to 5000 via 348° track to CHETZ and via 333° track to GEP VORTAC and hold, continue climb-in-hold to 5000.

ATIS	MINNEAPOLIS APP CON	MINNEAPOLIS TOWER	GND CON	CLNC DEL
ARR 135.35 239.275	119.3 335.5	123.95 273.55 (12L-30R)	N 121.8 348.6	133.2
DEP 120.8		126.7 273.55 (12R-30L, 4-22)	S 121.9 348.6	
		123.675 273.55 (17-35)	W 127.925	



5000 ↑ 348° track	CHETZ	333° track	GEP

VGSI and RNAV glidepath not coincident.

CATEGORY	A	B	C	D
RNP 0.19 DA	1286/50		452 (500-1)	
RNP 0.30 DA	1329/60		495 (500-1¼)	

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

ELEV 841 D

HIRL all Rwys
REIL Rwys 17 and 30R
TDZ/CL Rwys 12L, 12R, 30L, and 35

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ATIS DEP 120.8
CLNC DEL 133.2
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH or EAST 124.7 357.4
NORTH or WEST 125.75 357.4

MINNEAPOLIS
115.3 MSP
Chan 100

Rwy 17
(For assigned 230° CW 285°)
3500

MSP 8

DME aircraft Rwy 12L/12R
(For assigned 060° CW 100°)
3500

MSP 7

R-010

Non DME Aircraft Rwy 12L/12R
(For assigned 060° CW 100°)
3500

FLYING CLOUD
117.7 FCM
Chan 124

FARMINGTON
115.7 FGT
Chan 104
N44°25.33′
W93°02.18′

V82,161

147°
(14)

FOBUG
N44°25.33′
W93°02.18′
4000

(11)

25

DOKTR
N44°15.48′
W92°55.35′

R-046

R-078

34

(9)

HALWAY
111.2 FOW
Chan 49

R-100

CORDY
N44°07.42′
W92°49.79′

(23)

R-329

ROCHESTER
112.0 RST
Chan 57
N43°46.98′
W92°35.80′

9000
*3500
168°
(74)

WATERLOO
112.2 ALO
Chan 59
N42°33.39′
W92°23.94′
L-28, H-5

R-347

DEPARTURE CROSSING RESTRICTIONS:
Runway 12L/R DME aircraft requires an ATC climb gradient of 546′ per NM to 3500.
Runway 12L/R Non-DME aircraft requires an ATC climb gradient of 594′ per NM to 3500.
Runway 17 requires an ATC climb gradient of 403′ per NM to 3500.

TAKE-OFF MINIMUMS
Rwy 4, 12L, 12R, 17, 22: Standard.
Rwy 35: Standard with minimum climb of 219′ per NM to 2100.
Rwy 30L: Standard with minimum climb of 210′ per NM to 2100.
Rwy 30R: Standard with minimum climb of 220′ per NM to 2100.

NOTE: RADAR required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF ALL RUNWAYS: Fly assigned heading for radar vectors to FGT VORTAC then via FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/FGT 14 DME at or above 4000. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude.

DME EQUIPPED AIRCRAFT RWY 12L/12R: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence. . . .

TAKE-OFF RUNWAY 17: For assigned headings from 230° clockwise to 285° cross MSP 8 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence. . . .

NON DME EQUIPPED AIRCRAFT RWY 12L/12R: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence. . . .

TAKE-OFF RUNWAYS 4, 22, 30L/30R, 35: Initially assigned heading. Thence. . . .

. . . .via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

WATERLOO TRANSITION (RST4.ALO): From over RST VOR/DME via RST R-168 and ALO R-347 to ALO VORTAC.

TAKE-OFF OBSTACLE NOTES:

RWY 4: Multiple trees beginning 800′ from DER, 264′ left of centerline, up to 75′ AGL/921′ MSL. Rod on building 2528′ from DER, 1175′ left of centerline, 78′ AGL/922′ MSL. Fence 803′ from DER, 585′ left of centerline, 15′ AGL/860′ MSL. Antenna on OL building 456′ from DER, 319′ left of centerline, 13′ AGL/850′ MSL. Light poles 1932′ from DER, 718′ left of centerline, 45′ AGL/885′ MSL. Stack 4535′ from DER, 481′ left of centerline, 139′ AGL/949′ MSL.

RWY 12R: Multiple trees beginning 1477′ from DER, 407′ left of centerline, up to 86′ AGL/851′ MSL. Multiple trees beginning 1426′ from DER, 124′ right of centerline, up to 111′AGL/847′ MSL. Light pole 1408′ from DER, 746′ right of centerline, 85′ AGL/843′ MSL. Radar reflector 983′ from DER, 32′ left of centerline, 15′ AGL/829′ MSL. Pipe on building 826′ from DER, 576′ left of centerline, 10′ AGL/825′ AGL. OL on LOC 766′ from DER, on centerline, 7′ AGL/821′ MSL.

RWY 17: Antenna 1272′ from DER, 562′ right of centerline, 57′ AGL/891′ MSL. Pole 409′ from DER, 530′ right of centerline, 29′ AGL/866′ MSL. Wind direction indicator on building 2619′ from DER, 881′ left of centerline, 97′ AGL/918′ MSL. Building 2619′ from DER, 859′ left of centerline, 84′ AGL/905′ MSL. Light 1176′ from DER, 291′ right of centerline, 11′ AGL/875′ MSL. Tree 2619′ from DER, on centerline , 79′ AGL/900′ MSL.

RWY 22: Tree 2906′ from DER, 833′ right of centerline, 94′ AGL/934′ MSL. Hopper 1717′ from DER, 456′ left of centerline, 48′ AGL/888′ MSL.

RWY 30L: Multiple trees beginning 1113′ from DER, 701′ left of centerline , up to 80′ AGL/919′ MSL. Tree 1230′ from DER, 633′ right of centerline, 30′ AGL/877′ MSL. Ground 28′ from DER, 490′ right of centerline, 0′ AGL/844′ MSL.

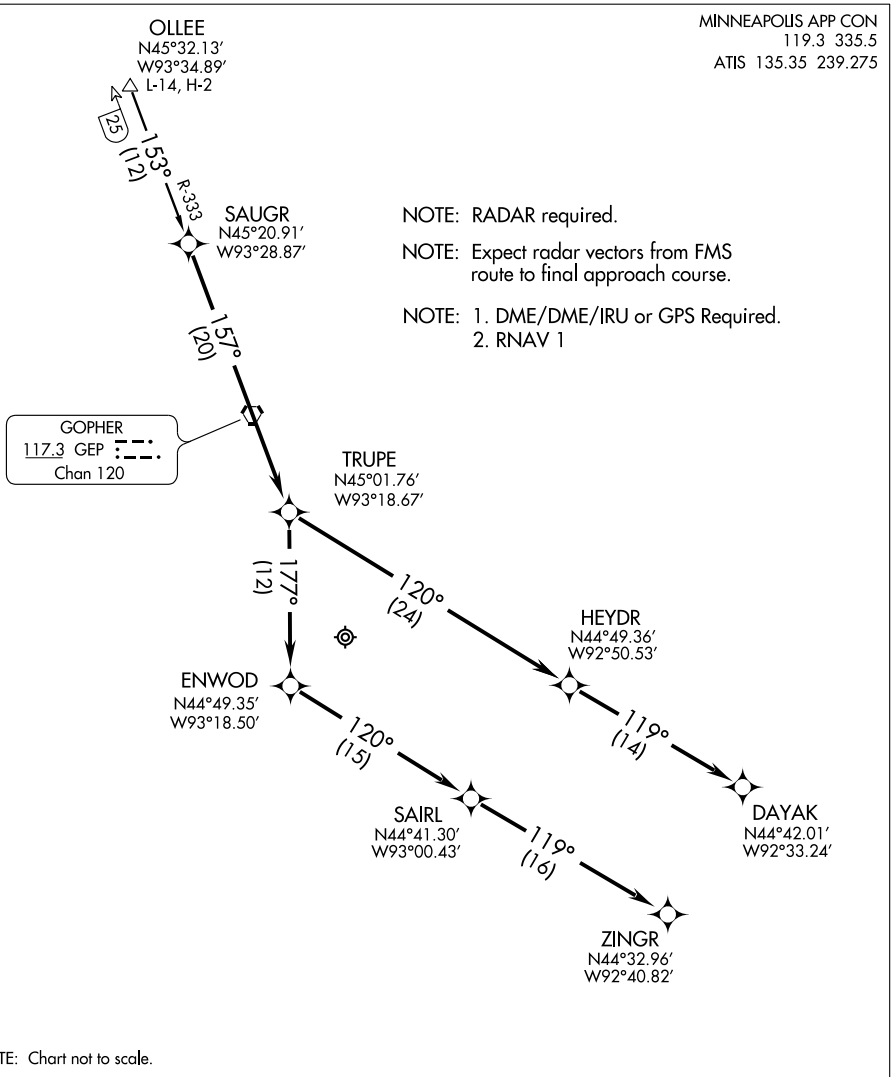
RWY 30R: Building 1056′ from DER, 198′ left of centerline, 13′ AGL/853′ MSL. Multiple trees beginning 3010′ from DER, 334′ left of centerline, up to 94′ AGL/940′ MSL. Light pole 1849′ from DER, 698′ right of centerline, 17′ AGL/871′ MSL. Fence 1327′ from DER, 667′ right of centerline, 8′ AGL/ 857′ MSL. Tree 3703′ from DER, 350′ right of centerline, 67′ AGL/ 914′ MSL. Rod on pole 3143′ from DER, 47′ right of centerline, 38′ AGL/898′ MSL. Tree 175′ from DER, 398′ right of centerline, 73′ AGL/883′ MSL.

RWY 35: Multiple trees beginning 1989′ from DER, 351′ left of centerline, up to 65′ AGL/902′ MSL. Multiple buildings beginning 5.5 NM from DER, 1787′ left of centerline, up to 811′ AGL/1743′ MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010

SAUGR ONE (FMS) ARRIVAL

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN
ST-264 (FAA)
MINNEAPOLIS, MINNESOTA



NOTE: Chart not to scale.

Via the GOPHER STAR from over SAUGR WP. Thence . . . .

FOR RUNWAY 30L ARRIVALS: To TRUPE WP to ENWOD WP to SAIRL WP to ZINGR WP.

FOR RUNWAY 30R ARRIVALS: To TRUPE WP to HEYDR WP to DAYAK WP.

SAUGR ONE (FMS) ARRIVAL

MINNEAPOLIS, MINNESOTA
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN

08157

NC-1, 21 OCT 2010 to 18 NOV 2010

SCHEP THREE DEPARTURE

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
SL-264 (FAA)
MINNEAPOLIS, MINNESOTA

SCHEP THREE DEPARTURE
(SCHEP3.SCHEP) 10098
MINNEAPOLIS, MINNESOTA
MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)
NC-1, 21 OCT 2010 to 18 NOV 2010

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Fly assigned heading for radar vectors to MSP R-232 to SCHEP INT/MSP 66 DME. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude.

DME EQUIPPED AIRCRAFT RWY 12L/12R: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAY 17: For assigned headings from 230° clockwise to 285° cross MSP 8 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

NON DME EQUIPPED AIRCRAFT RWY 12L/12R: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAYS 4, 22, 30L/30R, 35: Initially assigned heading, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

O'NEILL TRANSITION (SCHEP3.ONL): From over SCHEP INT via OTG R-045 to OTG VOR/DME. Then via OTG R-236 and ONL R-052 to ONL VORTAC.

WOLBACH TRANSITION (SCHEP3.OBH): From over SCHEP INT via OTG R-045 to OTG VOR/DME. Then via OTG R-215 and OBH R-034 to OBH VORTAC.

TAKE-OFF OBSTACLE NOTES:

RWY 4: Multiple trees beginning 800′ from DER, 264′ left of centerline, up to 75′ AGL/921′ MSL. Rod on building 2528′ from DER, 1175′ left of centerline, 78′ AGL/922′ MSL. Fence 803′ from DER, 585′ left of centerline, 15′ AGL/860′ MSL. Antenna on OL building 456′ from DER, 319′ left of centerline, 13′ AGL/850′ MSL. Light poles 1932′ from DER, 718′ left of centerline, 45′ AGL/885′ MSL. Stack 4535′ from DER, 481′ left of centerline, 139′ AGL/949′ MSL.

RWY 12R: Multiple trees beginning 1477′ from DER, 407′ left of centerline, up to 86′ AGL/851′ MSL. Multiple trees beginning 1426′ from DER, 124′ right of centerline, up to 111′AGL/847′ MSL. Light pole 1408′ from DER, 746′ right of centerline, 85′ AGL/843′ MSL. Radar reflector 983′ from DER, 32′ left of centerline, 15′ AGL/ 829 MSL. Pipe on building 826′ from DER, 576′ left of centerline, 10′ AGL/825′ AGL. OL on LOC 766′ from DER, on centerline, 7′ AGL/821′ MSL.

RWY 17: Antenna 1272′ from DER, 562′ right of centerline, 57′ AGL/891′ MSL. Pole 409′ from DER, 530′ right of centerline, 29′ AGL/866′ MSL. Wind direction indicator on building 2619′ from DER, 881′ left of centerline, 97′ AGL/918′ MSL. Building 2619′ from DER, 859′ left of centerline, 84′ AGL/905′ MSL. Light 1176′ from DER, 291′ right of centerline, 11′ AGL/875′ MSL. Tree 2619′ from DER, on centerline , 79′ AGL/900′ MSL.

RWY 22: Tree 2906′ from DER, 833′ right of centerline, 94′ AGL/934′ MSL. Hopper 1717′ from DER, 456′ left of centerline, 48′ AGL/888′ MSL.

RWY 30L: Multiple trees beginning 1113′ from DER, 701′ left of centerline , up to 80′ AGL/919′ MSL. Tree 1230′ from DER, 633′ right of centerline, 30′ AGL/877′ MSL. Ground 28′ from DER, 490′ right of centerline, 0′ AGL/844′ MSL.

RWY 30R: Building 1056′ from DER, 198′ left of centerline, 13′ AGL/853′ MSL. Multiple trees beginning 3010′ from DER, 334′ left of centerline, up to 94′ AGL/940′ MSL. Light pole 1849′ from DER, 698′ right of centerline, 17′ AGL/871′ MSL. Fence 1327′ from DER, 667′ right of centerline, 8′ AGL/ 857′ MSL. Tree 3703′ from DER, 350′ right of centerline, 67′ AGL/ 914′ MSL. Rod on pole 3143′ from DER, 47′ right of centerline, 38′ AGL/898′ MSL.

RWY 35: Tree 175′ from DER, 398′ right of centerline, 73′ AGL/883′ MSL. Multiple trees beginning 1989′ from DER, 351′ left of centerline, up to 65′ AGL/902′ MSL. Multiple buildings beginning 5.5 NM from DER, 1787′ left of centerline, up to 811′ AGL/1743′ MSL.

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SKETR THREE ARRIVAL

(SKETR.SKETR3) 08157

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN

MINNEAPOLIS, MINNESOTA

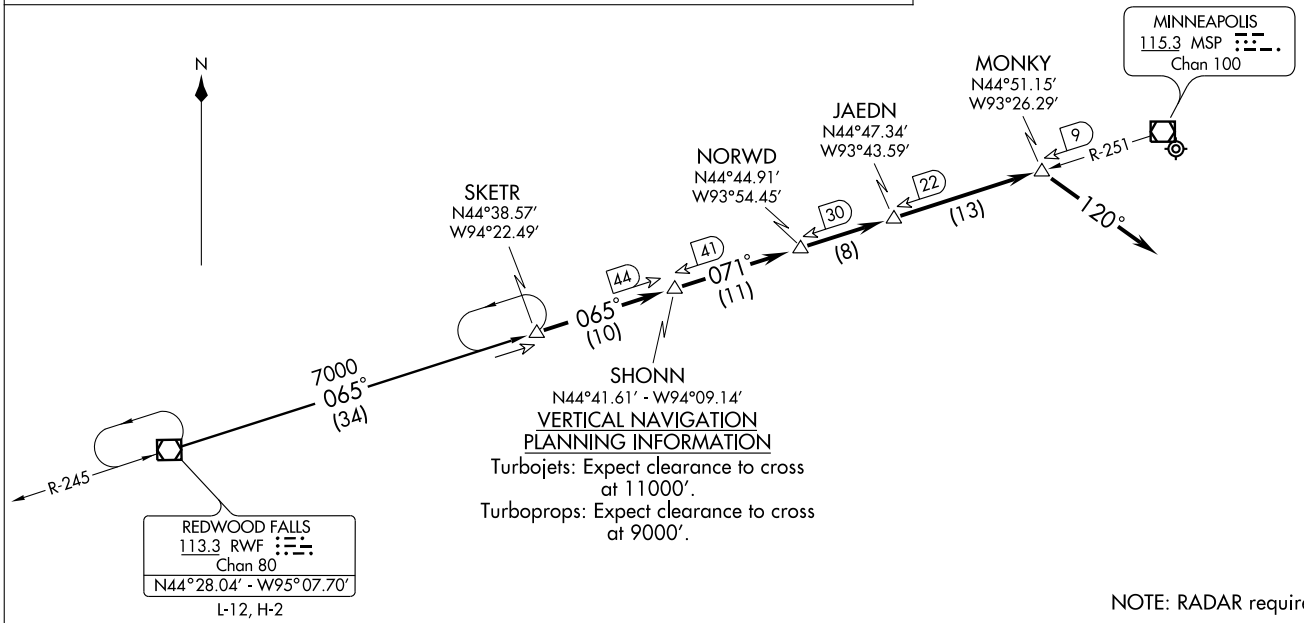
REDWOOD FALLS TRANSITION (RWF.SKETR3): From over RWF VOR/DME via RWF R-065 to SKETR/34 DME. Thence....

....Via the RWF R-065 to SKETR/34 DME, then to SHONN/44 DME, then via MSP R-251 to NORWD/30 DME, then to JAEDN/22 DME, then to MONKY/9 DME. Thence....

LANDING MSP RUNWAYS 30L/R, 35: Via 120° heading for radar vectors to final approach course.

ALL OTHER RUNWAYS: Via radar vectors to final approach course.

MINNEAPOLIS APP CON
119.3 335.5
ATIS 135.35 239.275



NOTE: RADAR required.

NOTE: DME required.

NOTE: Chart not to scale.

SKETR THREE ARRIVAL

(SKETR.SKETR3) 08157

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN

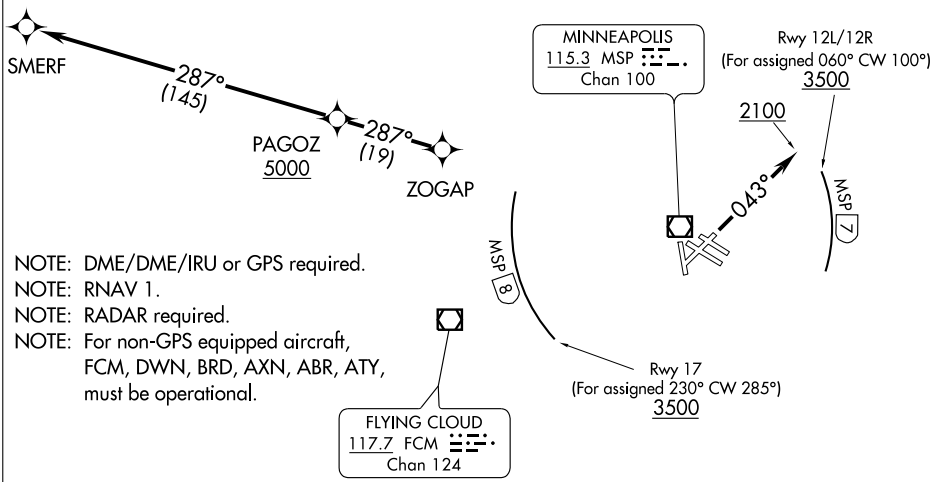
MINNEAPOLIS, MINNESOTA

ST-264 (FAA)

ATIS DEP 120.8
CLNC DEL
133.2
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH or EAST 124.7 357.4
NORTH or WEST 125.75 357.4

TAKE-OFF MINIMUMS:
Rwys 4, 22, 12L, 12R, 17: Standard.
Rwy 30L: Standard with minimum climb of 210′ per NM to 2100.
Rwy 30R: Standard with minimum climb of 220′ per NM to 2100.
Rwy 35: Standard with minimum climb of 219′ per NM to 2100.

DEPARTURE CROSSING RESTRICTIONS:
Rwy 12L/12R requires an ATC climb gradient of 546′ per NM to 3500.
Rwy 17 requires an ATC climb gradient of 403′ per NM to 3500.



NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR required.
NOTE: For non-GPS equipped aircraft, FCM, DWN, BRD, AXN, ABR, ATY, must be operational.

NOTE: Chart not to scale.

(NOTES CONTINUED ON FOLLOWING PAGE)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 4: Climb heading 043° to 2100. Thence . . . .

TAKE-OFF RUNWAYS 12L/12R: For assigned headings from 060° clockwise to 100°, cross MSP VOR/DME 7 DME Arc at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAY 17: For assigned headings from 230° clockwise to 285°, cross MSP VOR/DME 8 DME Arc at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAYS 22, 30L/30R, 35: Climb on assigned heading for radar vectors. Thence . . . .

. . . . expect radar vectors to ZOGAP, then via track 287° to PAGOZ and via track 287° to SMERF. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude. Expect filed altitude/flight level 10 minutes after departure.

TAKE-OFF OBSTACLE NOTES

RWY 4: Multiple trees beginning 800′ from DER, 264′ left of centerline, up to 75′ AGL/921′ MSL.
Rod on building 2528′ from DER, 1175′ left of centerline, 78′ AGL/922′ MSL.
Fence 803′ from DER, 585′ left of centerline, 15′ AGL/860′ MSL.
Antenna on OL building 456′ from DER, 319′ left of centerline, 13′ AGL/850′ MSL.
LT poles 1932′ from DER, 718′ left of centerline, 45′ AGL/885′ MSL.
Stack 4535′ from DER, 481′ left of centerline, 139′ AGL/949′ MSL.

RWY 22: Tree 2906′ from DER, 833′ right of centerline, 94′ AGL/934′ MSL.
Hopper 1717′ from DER, 456′ left of centerline, 48′ AGL/888′ MSL.

RWY 30L: Multiple trees beginning 1113′ from DER, 701′ left of centerline, up to 80′ AGL/919′ MSL.
Tree 1230′ from DER, 633′ right of centerline, 30′ AGL/877′ MSL.
Ground 28′ from DER, 490′ right of centerline, 844′ MSL.

RWY 17: Antenna 1272′ from DER, 562′ right of centerline, 57′ AGL/891′ MSL.
Pole 409′ from DER, 530′ right of centerline, 29′ AGL/866′ MSL.
Wind direction indicator on bldg 2619′ from DER, 881′ left of centerline, 97′ AGL/918′ MSL.
Bldg 2619′ from DER, 859′ left of centerline, 84′ AGL/905′ MSL.
LT 1176′ from DER, 291′ right of centerline, 11′ AGL/875′ MSL.
Tree 2619′ from DER, on centerline, 79′ AGL/900′ MSL.

RWY 30R: Bldg 1056′ from DER, 198′ left of centerline, 13′ AGL/853′ MSL.
Multiple trees beginning 3010′ from DER, 334′ left of centerline, up to 94′ AGL/940′ MSL.
LT pole 1849′ from DER, 698′ right of centerline, 17′ AGL/871′ MSL.
Fence 1327′ from DER, 667′ right of centerline, 8′ AGL/857′ MSL.
Tree 3703′ from DER, 350′ right of centerline, 67′ AGL/914′ MSL.
Rod on pole 3143′ from DER, 47′ right of centerline, 38′ AGL/898′ MSL.

RWY 35: Tree 175′ from DER, 398′ right of centerline, 73′ AGL/883′ MSL.
Multiple trees beginning 1989′ from DER, 351′ left of centerline, up to 65′ AGL/902′ MSL.
Multiple buildings beginning 5.45 NM from DER, 1787′ left of centerline, up to 811′ AGL/1743′ MSL.

RWY 12R: Multiple trees beginning 1477′ from DER, 407′ left of centerline, up to 86′ AGL/851′ MSL.
Multiple trees beginning 1426′ from DER, 124′ right of centerline, up to 111′ AGL/847′ MSL.
LT pole 1408′ from DER, 746′ right of centerline, 85′ AGL/843′ MSL.
Radar reflector 983′ from DER, 32′ left of centerline, 15′ AGL/829′ MSL.
Pipe on bldg, 826′ from DER, 576′ left of centerline, 10′ AGL/825′ MSL.
OL on LOC 766′ from DER, on centerline, 7′ AGL/821′ MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010

TWOLF TWO ARRIVAL

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA

NC-1, 21 OCT 2010 to 18 NOV 2010

MINNEAPOLIS APP CON
126.95 335.5
118.72 (MSP RWY 35)
MINNEAPOLIS ATIS
135.35 239.275
ANOKA COUNTY ATIS 120.625
CRYSTAL ATIS 124.475
FLYING CLOUD ATIS 124.9
ST. PAUL DOWNTOWN ATIS
118.35

L.O. SIMENSTAD MUNI

ANOKA COUNTY-BLAINE AIRPORT
(JANES FIELD)

NEW RICHMOND RGNL

GOPHER
117.3 GEP
Chan 120

CRYSTAL

ST. PAUL DOWNTOWN HOLMAN FIELD

FLYING CLOUD

300°

MINNEAPOLIS-ST. PAUL INTL/
WOLD CHAMBERLAIN

FLYING CLOUD
117.7 FCM
Chan 124
N44°49.54′-W93°27.41′

R-180

R-178

R-103

SLIKK
N44°47.90′
W93°17.21′

330°
(11)

AIRLAKE

FARMINGTON
115.7 FGT
Chan 104
N44°37.86′-W93°10.92′

TRGET
N44°13.88′-W93°27.73′

VERTICAL NAVIGATION
PLANNING INFORMATION

MSP: Expect clearance to cross at 11000.
All other airports:
Turbojets: Expect clearance to cross at 8000.
Turboprops: Expect clearance to cross at 7000.

5000
(36)
360°

(8)

R-201

GDNEE
N44°30.68′
W93°15.98′

17

(9)

55

PIKKL
N44°22.82′
W93°21.49′

021°
5000
(10)

R-081

6000

62

(7)

MANKATO
110.8 MKT
Chan 45

LYNKS
N44°06.89′
W93°28.39′

8000
(22)

84

KGEEE
N43°44.94′
W93°30.47′

12000
358°
(28)

112

TWOLF
N43°17.00′
W93°33.09′

FORT DODGE
113.5 FOD
Chan 82
N42°36.67′-W94°17.69′
L-12, H-5

12000
032°
(30)

52

R-178
GEP

NOTE: DME and RADAR Required.

12000
*2900
032°
(22)

TICKT
N42°53.71′
W93°59.01′

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

TWOLF TWO ARRIVAL

MINNEAPOLIS, MINNESOTA

(TWOLF.TWOLF2) 10154

ARRIVAL DESCRIPTION

FORT DODGE TRANSITION (FOD.TWOLF2): From over FOD VORTAC via FOD R-032 to TWOLF/FOD 52 DME, Thence . . . .

....From over TWOLF/GEP 112 DME via GEP R-178 to KGEEE/GEP 84 DME, then as depicted to TRGET INT/GEP 55 DME. Thence....

LANDING MSP RWYS 12L/R: From over TRGET INT via FGT R-201 to FGT VORTAC, then via FGT R-330 to SLIKK INT/FGT 11 DME, then via heading 300° for radar vectors to final approach course.

LANDING MSP RWYS 30L/R, 4, 22, 17, 35: From over TRGET INT via FGT R-201 to FGT VORTAC, then via radar vectors to final approach course.

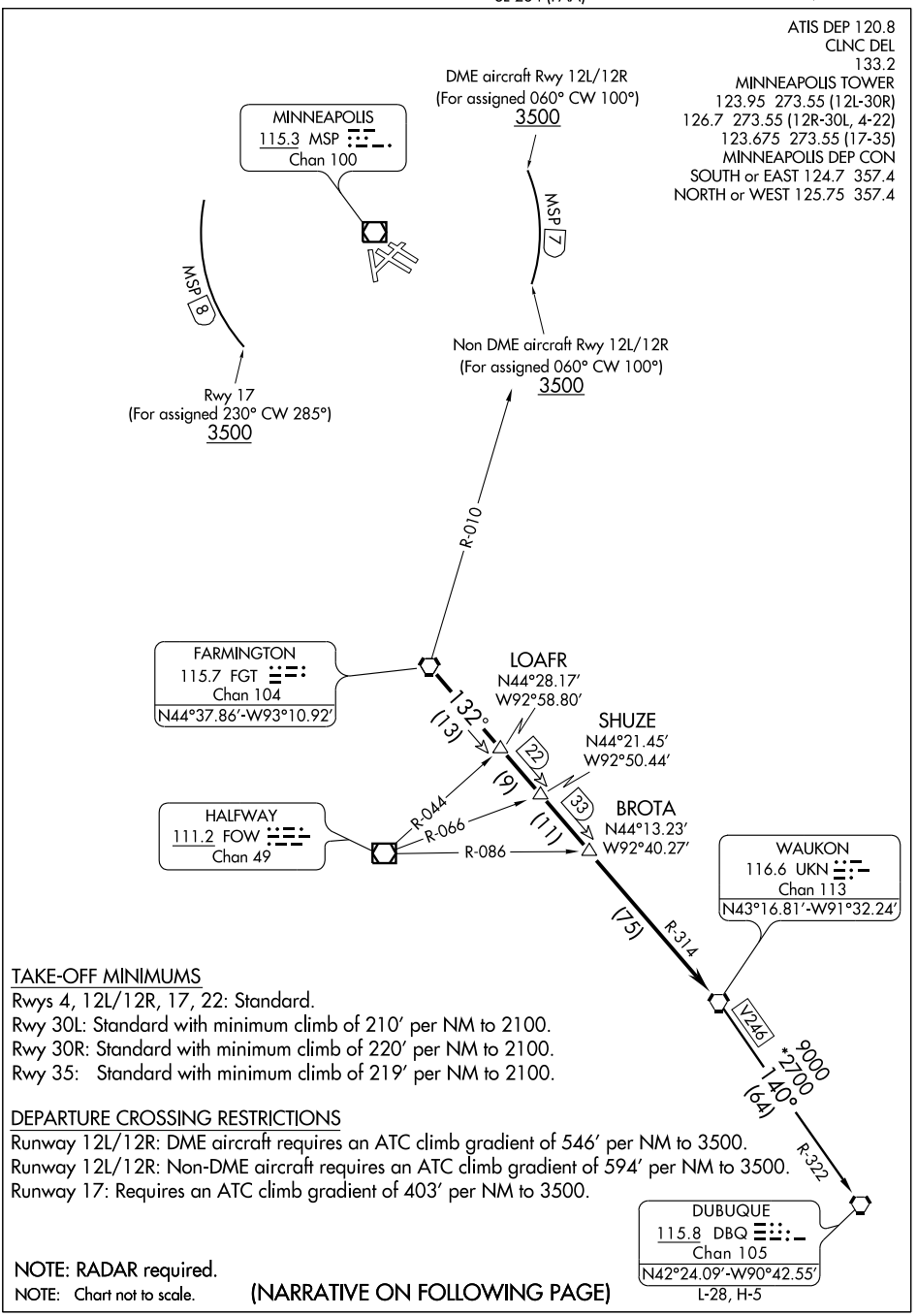
LANDING ALL OTHER AIRPORTS: From over TRGET INT via FCM R-180 to FCM VOR/DME, then expect radar vectors to final approach course.

NC-1, 21 OCT 2010 to 18 NOV 2010

WAUKON THREE DEPARTURE

SL-264 (FAA)

NC-1, 21 OCT 2010 to 18 NOV 2010



TAKE-OFF MINIMUMS

Rwys 4, 12L/12R, 17, 22: Standard.
Rwy 30L: Standard with minimum climb of 210′ per NM to 2100.
Rwy 30R: Standard with minimum climb of 220′ per NM to 2100.
Rwy 35: Standard with minimum climb of 219′ per NM to 2100.

DEPARTURE CROSSING RESTRICTIONS

Runway 12L/12R: DME aircraft requires an ATC climb gradient of 546′ per NM to 3500.
Runway 12L/12R: Non-DME aircraft requires an ATC climb gradient of 594′ per NM to 3500.
Runway 17: Requires an ATC climb gradient of 403′ per NM to 3500.

NOTE: RADAR required.
NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

L-28, H-5

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Fly assigned heading for radar vectors to FGT VORTAC then via FGT R-132 and UKN R-314 to UKN VORTAC. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude.

DME EQUIPPED AIRCRAFT RWY 12L/12R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

NON DME EQUIPPED AIRCRAFT RWY 12L/12R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAY 17 DEPARTURES: For assigned headings 230° clockwise to 285° cross MSP 8 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAYS 4, 22, 30L/30R, 35: Initially assigned heading. Thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

DUBUQUE TRANSITION (UKN3.DBQ): From over UKN VORTAC via UKN R-140 and DBQ R-322 to DBQ VORTAC.

TAKE-OFF OBSTACLE NOTES

RWY 4: Multiple trees beginning 800′ from DER, 264′ left of centerline, up to 75′ AGL/921′ MSL. Rod on building 2528′ from DER, 1175′ left of centerline, 78′ AGL/922′ MSL. Fence 803′ from DER, 585′ left of centerline, 15′ AGL/860′ MSL. Antenna on OL building 456′ from DER, 319′ left of centerline, 13′ AGL/850′ MSL. Light poles 1932′ from DER, 718′ left of centerline, 45′ AGL/885′ MSL. Stack 4535′ from DER, 481′ left of centerline, 139′ AGL/949′ MSL.

RWY 22: Tree 2906′ from DER, 833′ right of centerline, 94′ AGL/934′ MSL. Hopper 1717′ from DER, 456′ left of centerline, 48′ AGL/888′ MSL.

RWY 17: Antenna 1272′ from DER, 562′ right of centerline, 57′ AGL/891′ MSL. Pole 409′ from DER, 530′ right of centerline, 29′ AGL/866′ MSL. Wind direction indicator on building 2619′ from DER, 881′ left of centerline, 97′ AGL/918′ MSL. Building 2619′ from DER, 859′ left of centerline, 84′ AGL/905′ MSL. Light 1176′ from DER, 291′ right of centerline, 11′ AGL/875′ MSL. Tree 2619′ from DER, on centerline, 79′ AGL/900′ MSL.

RWY 30L: Multiple trees beginning 1113′ from DER, 701′ left of centerline , up to 80′ AGL/919′ MSL. Tree 1230′ from DER, 633′ right of centerline, 30′ AGL/877′ MSL. Ground 28′ from DER, 490′ right of centerline 0′ AGL/844′ MSL.

RWY 30R: Building 1056′ from DER, 198′ left of centerline, 13′ AGL/853′ MSL. Multiple trees beginning 3010′ from DER, 334′ left of centerline, up to 94′ AGL/940′ MSL. Light pole 1849′ from DER, 698′ right of centerline, 17′ AGL/871′ MSL. Fence 1327′ from DER, 667′ right of centerline, 8′ AGL/857′ MSL. Tree 3703′ from DER, 350′ right of centerline, 67′ AGL/914′ MSL. Rod on pole 3143′ from DER, 47′ right of centerline, 38′ AGL/898′ MSL.

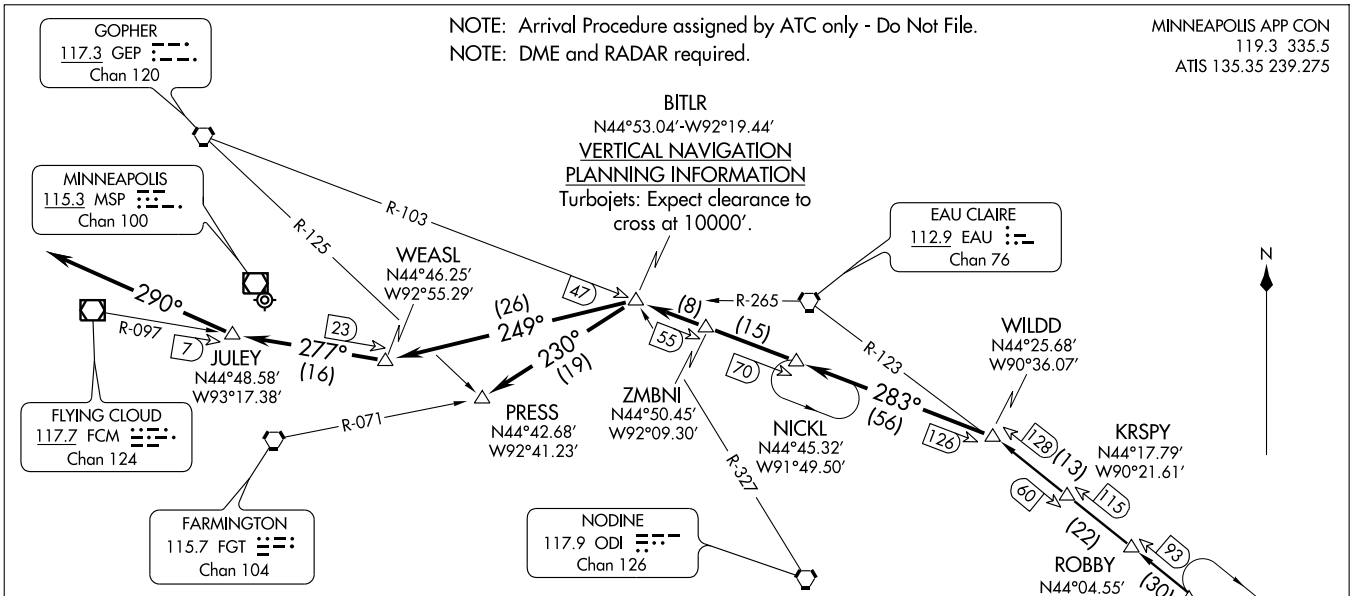
RWY 35: Tree 175′ from DER, 398′ right of centerline, 73′ AGL/883′ MSL. Multiple trees beginning 1989′ from DER, 351′ left of centerline, up to 65′ AGL/902′ MSL. Multiple buildings beginning 5.45 NM from DER, 1787′ left of centerline, up to 811′ AGL/1743′ MSL.

RWY 12R: Multiple trees beginning 1477′ from DER, 407′ left of centerline, up to 86′ AGL/851′ MSL. Multiple trees beginning 1426′ from DER, 124′ right of centerline, up to 111′ AGL/847′ MSL. Light pole 1408′ from DER, 746′ right of centerline, 85′ AGL/843′ MSL. Radar reflector 983′ from DER, 32′ left of centerline, 15′ AGL/829′ MSL. Pipe on building, 826′ from DER, 576′ left of centerline, 10′ AGL/825′ MSL. OL on LOC 766′ from DER, on centerline, 7′ AGL/821′ MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010

WILDD TWO ARRIVAL (WILDD.WILDD2) 10098

WILDD TWO ARRIVAL (WILDD.WILDD2) 10098



BADGER TRANSITION (BAE.WILDD2): From over BAE VORTAC via BAE R-307 to WILDD INT. Thence....
....From over WILDD/BAE 128 DME via GEP R-103 to BITLR/GEP 47 DME. Thence....

LANDING MSP RWYS 30L/30R: PRESS SEGMENT- Via heading 230° to FGT R-071/PRESS INT/FGT 22 DME, then expect radar vectors to final approach course.

LANDING MSP RWYS 12L/12R: WEASL SEGMENT- Via heading 249° to FCM R-097/WEASL INT/FCM 23 DME, then via FCM R-097 to JULEY/FCM 7 DME, then via heading 290° for radar vectors to final approach course.

LANDING ALL OTHER MSP RWYS: Expect radar vectors to final approach course.

MINNEAPOLIS, MINNESOTA

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA

WLSTN THREE DEPARTURE

(WLSTN3.WLSTN) 10042

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

MINNEAPOLIS, MINNESOTA

(WLSTN3.WLSTN) 10042

WLSTN THREE DEPARTURE

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

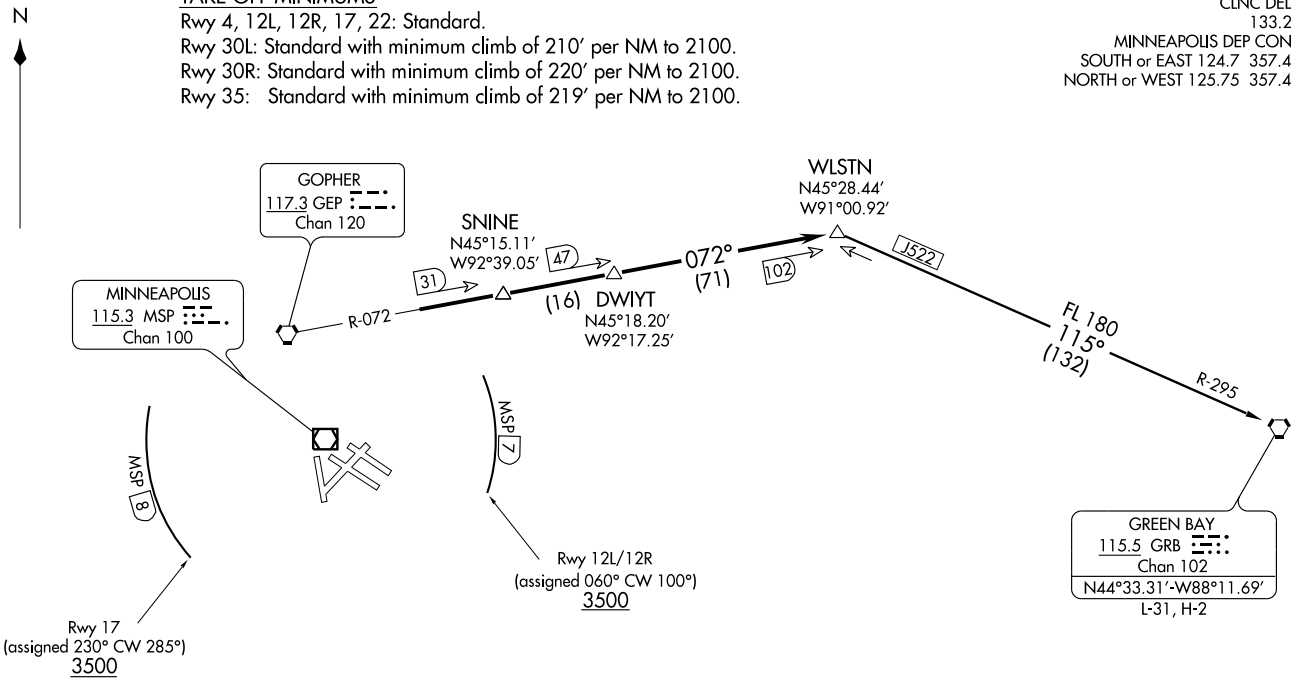
SL-264 (FAA)

MINNEAPOLIS, MINNESOTA

ATIS DEP 120.8
CLNC DEL
133.2
MINNEAPOLIS DEP CON
SOUTH or EAST 124.7 357.4
NORTH or WEST 125.75 357.4

TAKE-OFF MINIMUMS

Rwy 4, 12L, 12R, 17, 22: Standard.
Rwy 30L: Standard with minimum climb of 210′ per NM to 2100.
Rwy 30R: Standard with minimum climb of 220′ per NM to 2100.
Rwy 35: Standard with minimum climb of 219′ per NM to 2100.



DEPARTURE CROSSING RESTRICTIONS

Runway 12L/12R DME aircraft requires an ATC climb gradient of 546′ per NM to 3500.
Runway 17 requires an ATC climb gradient of 403′ per NM to 3500.

NOTE: RADAR and DME required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Fly assigned heading for radar vectors to GEP R-072 to WLSTN/GEP 102 DME. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude. Thence . . . .

TAKE-OFF RUNWAY 12L/12R DEPARTURES: For assigned headings from 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAY 17 DEPARTURES: For assigned headings from 230° clockwise to 285° cross MSP 8 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence . . . .

TAKE-OFF RUNWAYS 4, 22, 30L/30R, 35: Initially assigned heading. Thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

GREEN BAY TRANSITION (WLSTN3.GRB): From over WLSTN via GRB R-295 to GRB VORTAC.

TAKE-OFF OBSTACLE NOTES

RWY 4: Multiple trees beginning 800′ from DER, 264′ left of centerline, up to 75′ AGL/921′ MSL.
Rod on building 2528′ from DER, 1175′ left of centerline, 78′ AGL/922′ MSL.
Fence 803′ from DER, 585′ left of centerline, 15′ AGL/860′ MSL.
Antenna on OL building 456′ from DER, 319′ left of centerline, 13′ AGL/850′ MSL.
Light poles 1932′ from DER, 718′ left of centerline, 45′ AGL/885′ MSL.
Stack 4535′ from DER, 481′ left of centerline, 139′ AGL/949′ MSL.

RWY 22: Tree 2906′ from DER, 833′ right of centerline, 94′ AGL/934′ MSL.
Hopper 1717′ from DER, 456′ left of centerline, 48′ AGL/888′ MSL.

RWY 30L: Multiple trees beginning 1113′ from DER, 701′ left of centerline, up to 80′ AGL/919′ MSL.
Tree 1230′ from DER, 633′ right of centerline, 30′ AGL/877′ MSL.
Ground 28′ from DER, 490′ right of centerline, 0′ AGL/844′ MSL.

RWY 17: Antenna 1272′ from DER, 562′ right of centerline, 57′ AGL/891′ MSL.
Pole 409′ from DER, 530′ right of centerline, 29′ AGL/866′ MSL.
Wind direction indicator on building 2619′ from DER, 881′ left of centerline, 97′ AGL/918′ MSL.
Building 2619′ from DER, 859′ left of centerline, 84′ AGL/905′ MSL.
Light 1176′ from DER, 291′ right of centerline, 11′ AGL/875′ MSL.
Tree 2619′ from DER, on centerline, 79′ AGL/900′ MSL.

RWY 30R: Building 1056′ from DER, 198′ left of centerline, 13′ AGL/853′ MSL.
Multiple trees beginning 3010′ from DER, 334′ left of centerline, up to 94′ AGL/940′ MSL.
Light pole 1849′ from DER, 698′ right of centerline, 17′ AGL/871′ MSL.
Fence 1327′ from DER, 667′ right of centerline, 8′ AGL/ 857′ MSL.
Tree 3703′ from DER, 350′ right of centerline, 67′ AGL/ 914′ MSL.
Rod on pole 3143′ from DER, 47′ right of centerline, 38′ AGL/898′ MSL.

RWY 35: Tree 175′ from DER, 398′ right of centerline, 73′ AGL/883′ MSL.
Multiple trees beginning 1989′ from DER, 351′ left of centerline, up to 65′ AGL/902′ MSL.
Multiple buildings beginning 5.5 NM from DER, 1787′ left of centerline, up to 811′ AGL/1743′ MSL.

RWY 12R: Multiple trees beginning 1477′ from DER, 407′ left of centerline, up to 86′ AGL/851′ MSL.
Multiple trees beginning 1426′ from DER, 124′ right of centerline, up to 111′AGL/847′ MSL.
Light pole 1408′ from DER, 746′ right of centerline, 85′ AGL/843′ MSL.
Radar reflector 983′ from DER, 32′ left of centerline, 15′ AGL/829′ MSL.
Pipe on building 826′ from DER, 576′ left of centerline, 10′ AGL/825′ MSL.
OL on LOC 766′ from DER, on centerline, 7′ AGL/821′ MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010

ZMBRO THREE DEPARTURE

(ZMBRO3.ZMBRO) 10098

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

MINNEAPOLIS, MINNESOTA

ZMBRO THREE DEPARTURE

(ZMBRO3.ZMBRO) 10098

MINNEAPOLIS-ST PAUL INTL/WOLD-CHAMBERLAIN (MSP)

SL-264 (FAA)

MINNEAPOLIS, MINNESOTA

ATIS DEP 120.8
CLNC DEL 133.2
MINNEAPOLIS TOWER
123.95 273.55 (12L-30R)
126.7 273.55 (12R-30L, 4-22)
123.675 273.55 (17-35)
MINNEAPOLIS DEP CON
SOUTH or EAST 124.7 357.4
NORTH or WEST 125.75 357.4

Rwy 17
(For assigned 230° CW 285°)
3500

MSP 8

MINNEAPOLIS
115.3 MSP
Chan 100

MSP 7

R-010

DME aircraft Rwy 12L/12R
(For assigned headings from 060° CW 100°)
3500

R-138

Non DME Aircraft Rwy 12L/12R
(For assigned headings from 060° CW 100°)
3500

138°

34

JEDET
N44°27.68′
W92°43.68′
4000

121°
(14)

ZMBRO
N44°20.50′
W92°26.91′

FARMINGTON
115.7 FGT
Chan 104

FLYING CLOUD
117.7 FCM
Chan 124

R-059

HALWAY
111.2 FOW
Chan 49

R-006

ROCHESTER
112.0 RST
Chan 57

9000
*2800
121°
(50)

NODINE
117.9 ODI
Chan 126
N43°54.74′-W91°28.05′
L-28, H-2

R-301

N

DEPARTURE CROSSING RESTRICTIONS:

NOTE: Runway 12L/R DME aircraft requires an ATC climb gradient of 546′ per NM to 3500.

NOTE: Runway 12L/R Non-DME aircraft requires an ATC climb gradient of 594′ per NM to 3500.

NOTE: Runway 17 requires an ATC climb gradient of 403′ per NM to 3500.

TAKE-OFF MINIMUMS:

Rwy 4, 22, 12L/R, 17: Standard.
Rwy 35: Standard with minimum climb of 219′ per NM to 2100.
Rwy 30L: Standard with minimum climb of 210′ per NM to 2100.
Rwy 30R: Standard with minimum climb of 220′ per NM to 2100.

NOTE: RADAR Required

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF ALL RUNWAYS: Fly assigned heading for radar vectors to MSP R-138 to JEDET INT/ MSP 34 DME, at or above 4000; then via ODI R-301 to ZMBRO INT/ODI 50 DME. Turbojet aircraft maintain 7000 or lower assigned altitude, all other aircraft maintain 5000 or lower assigned altitude, Thence . . . .

DME EQUIPPED AIRCRAFT RWY 12L/R DEPARTURES: For assigned heading 060° clockwise to 100°, cross MSP 7 DME at or above 3500, maintain assigned altitude. If unable to comply advise ATC as soon as possible prior to departure. Thence. . . .

TAKE-OFF RWY 17 DEPARTURES: For assigned heading 230° clockwise to 285° cross MSP 8 DME at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence. . . .

NON-DME EQUIPPED AIRCRAFT RWY 12L/R DEPARTURES: For assigned heading 060° clockwise to 100°, cross FGT R-010 at or above 3500, maintain assigned altitude. If unable to comply, advise ATC as soon as possible prior to departure. Thence. . . .

TAKE-OFF RWYS 4, 22, 30L/R, 35: Initially assigned heading, Thence. . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

NODINE TRANSITION (ZMBRO3.ODI): From over ZMBRO INT via ODI R-301 to ODI VORTAC.

TAKE-OFF OBSTACLE NOTES:

RWY 4: Multiple trees beginning 800′ from DER, 264′ left of centerline, up to 75′ AGL/921′ MSL. Rod on building 2528′ from DER, 1175′ left of centerline, 78′ AGL/922′ MSL. Fence 803′ from DER, 585′ left of centerline, 15′ AGL/860′ MSL. Antenna on OL building 456′ from DER, 319′ left of centerline, 13′ AGL/850′ MSL. Light poles 1932′ from DER, 718′ left of centerline, 45′ AGL/885′ MSL. Stack 4535′ from DER, 481′ left of centerline, 139′ AGL/949′ MSL.

RWY 12R: Multiple trees beginning 1477′ from DER, 407′ left of centerline, up to 86′ AGL/851′ MSL. Multiple trees beginning 1426′ from DER, 124′ right of centerline, up to 111′AGL/847′ MSL. Light pole 1408′ from DER, 746′ right of centerline, 85′ AGL/843′ MSL. Radar reflector 983′ from DER, 32′ left of centerline, 15′ AGL/829′ MSL. Pipe on building 826′ from DER, 576′ left of centerline, 10′ AGL/825′ AGL. OL on LOC 766′ from DER, on centerline, 7′ AGL/821′ MSL.

RWY 17: Antenna 1272′ from DER, 562′ right of centerline, 57′ AGL/891′ MSL. Pole 409′ from DER, 530′ right of centerline, 29′ AGL/866′ MSL. Wind direction indicator on building 2619′ from DER, 881′ left of centerline, 97′ AGL/918′ MSL. Building 2619′ from DER, 859′ left of centerline, 84′ AGL/905′ MSL. Light 1176′ from DER, 291′ right of centerline, 11′ AGL/875′ MSL. Tree 2619′ from DER, on centerline , 79′ AGL/900′ MSL.

RWY 22: Tree 2906′ from DER, 833′ right of centerline, 94′ AGL/934′ MSL. Hopper 1717′ from DER, 456′ left of centerline, 48′ AGL/888′ MSL.

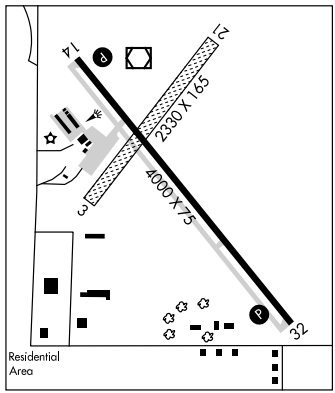
RWY 30L: Multiple trees beginning 1113′ from DER, 701′ left of centerline , up to 80′ AGL/919′ MSL. Tree 1230′ from DER, 633′ right of centerline, 30′ AGL/877′ MSL. Ground 28′ from DER, 490′ right of centerline, 0′ AGL/844′ MSL.

RWY 30R: Building 1056′ from DER, 198′ left of centerline, 13′ AGL/853′ MSL. Multiple trees beginning 3010′ from DER, 334′ left of centerline, up to 94′ AGL/940′ MSL. Light pole 1849′ from DER, 698′ right of centerline, 17′ AGL/871′ MSL. Fence 1327′ from DER, 667′ right of centerline, 8′ AGL/ 857′ MSL. Tree 3703′ from DER, 350′ right of centerline, 67′ AGL/ 914′ MSL. Rod on pole 3143′ from DER, 47′ right of centerline, 38′ AGL/898′ MSL.

RWY 35: Tree 175′ from DER, 398′ right of centerline, 73′ AGL/883′ MSL. Multiple trees beginning 1989′ from DER, 351′ left of centerline, up to 65′ AGL/902′ MSL. Multiple buildings beginning 5.5 NM from DER, 1787′ left of centerline, up to 811′ AGL/1743′ MSL.

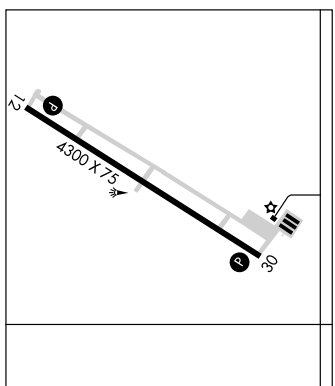
NC-1, 21 OCT 2010 to 18 NOV 2010

MONTEVIDEO–CHIPPEWA CO (MVE) 2 N UTC−6(−5DT) N44°58.14′ W95°42.62′ TWIN CITIES
1034 B **FUEL** 100LL NOTAM FILE MVE L–12I, 14H
RWY 14–32: H4000X75 (ASPH) S–14, D–18 MIRL 0.4% up NW IAP
RWY 14: REIL. PAPI(P4L).
RWY 32: REIL. PAPI (P4L).
RWY 03–21: 2330X165 (TURF)
RWY 03: Pole.
AIRPORT REMARKS: Attended Mon–Sat 1400–2230Z‡, Sun 1900–2230Z‡. Ultralights on and invof arpt. Rwy 03–21 not plowed winter months. Badger and gopher holes. Rwy 03–21 thlds and edges marked with yellow cones. Rwy 14–32 non frangible cages around REILS. ACTIVATE MIRL Rwy 14–32, REIL and PAPI Rwy 14 and REIL and PAPI Rwy 32—CTAF.
WEATHER DATA SOURCES: AWOS–3 111.6 MVE (320) 269–5830.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.45 (PRINCETON RADIO)
MINNEAPOLIS CENTER APP/DEP CON 125.5
RADIO AIDS TO NAVIGATION: NOTAM FILE MVE.
(T) VORW/DME 111.6 MVE Chan 53 N44°58.36′ W95°42.72′ at fld. 1034/5E. **AWOS–3.** Unmonitored.



MONTZ N43°34.43′ W94°19.08′ NOTAM FILE FRM. OMAHA
NDB (LOM) 420 FQ 311° 6.0 NM to Fairmont Muni.

MOORHEAD MUNI (JKJ) 4 SE UTC−6(−5DT) N46°50.36′ W96°39.84′ TWIN CITIES
918 B S4 **FUEL** 100LL, JET A TPA—1718 (800) NOTAM FILE JKJ L–14G
RWY 12–30: H4300X75 (ASPH) MIRL IAP
RWY 12: REIL. PAPI(P4L). **RWY 30:** REIL. PAPI(P4L).
AIRPORT REMARKS: Attended 1400–2300Z‡. For svc after hrs call 218–287–1400. Self svc fuel avbl with credit card 24 hrs. Arpt underlies Fargo TRSA, Hector Intl Class D Airspace 3 miles NW of arpt. Noise abatement procedures in effect, ctc arpt manager 218–287–1400. ACTIVATE MIRL Rwy 12–30, REIL Rwy 12 and Rwy 30 and PAPI Rwy 12 and Rwy 30—CTAF.
WEATHER DATA SOURCES: AWOS–3 120.0 (218) 287–5049.
COMMUNICATIONS: CTAF/UNICOM 123.0
FARGO APP/DEP CON 120.4 (1200–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.35 (0500–1200Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE FAR.
FARGO (H) VORTACW 116.2 FAR Chan 100 N46°45.20′ W96°51.08′ 047° 9.3 NM to fld. 910/9E. **HIWAS.**



VOR/DME MVE	APP CRS	Rwy Idg	4000
111.6	128°	TDZE	1034
Chan 53		Apt Elev	1034

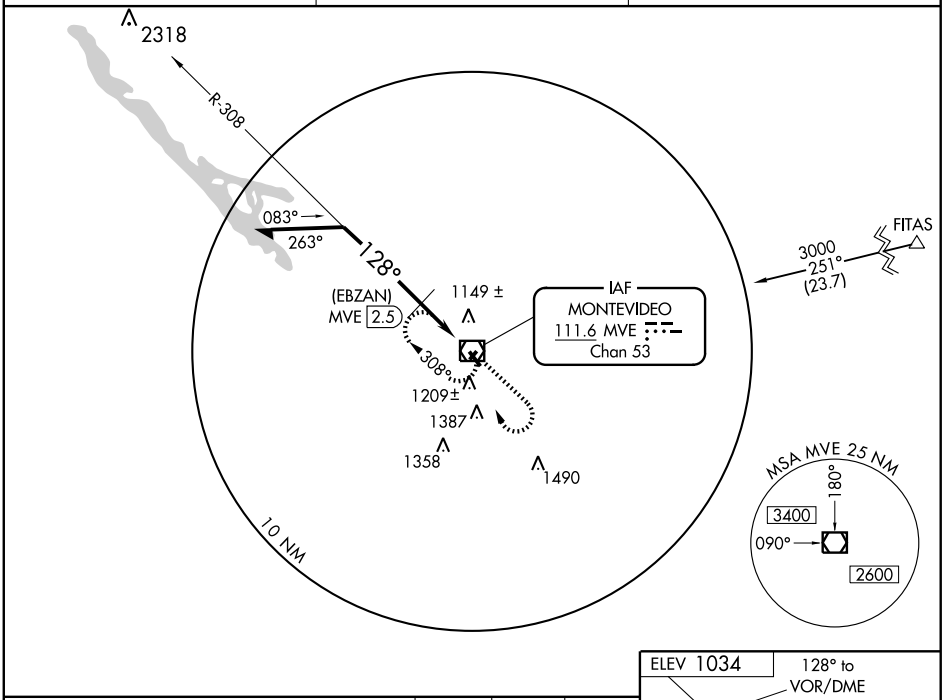
VOR or GPS RWY 14

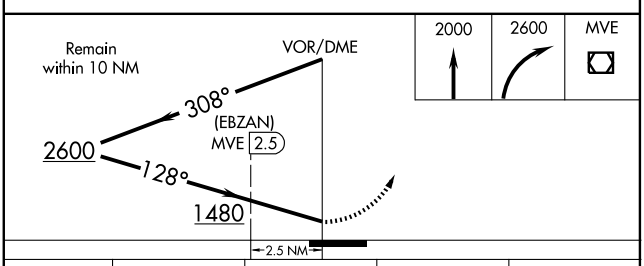
MONTEVIDEO-CHIPPEWA COUNTY (MVE)

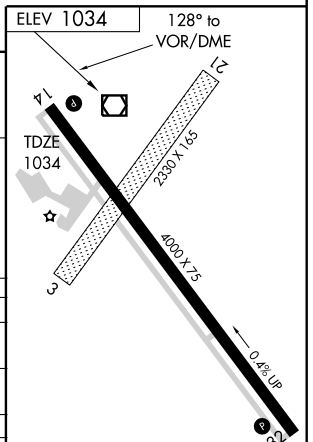
T
NA

MISSED APPROACH: Climb to 2000 then climbing right turn to 2600 direct MVE VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
111.6	125.5 323.1	122.8 (CTAF) L





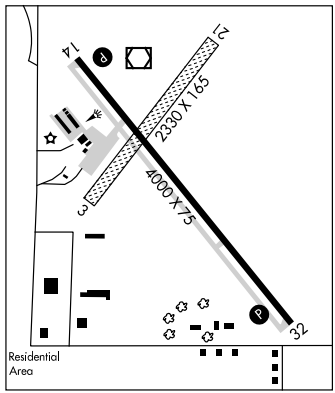


CATEGORY	A	B	C	D
S-14	1480-1	446 (500-1)	1480-1¼ 446 (500-1¼)	1480-1½ 446 (500-1½)
CIRCLING	1520-1	486 (500-1)	1520-1½ 486 (500-1½)	1700-2 666 (700-2)
DME MINIMUMS				
S-14	1400-1	366 (400-1)		1400-1¼ 366 (400-1¼)
CIRCLING	1520-1	486 (500-1)	1520-1½ 486 (500-1½)	1700-2 666 (700-2)

REIL Rwys 14 and 32 L
MIRL Rwy 14-32 L

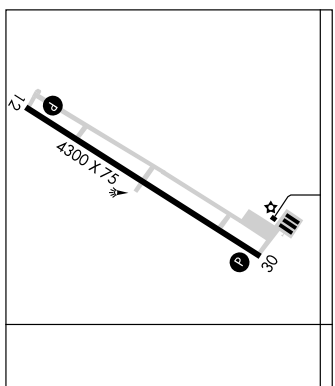
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

MONTEVIDEO–CHIPPEWA CO (MVE) 2 N UTC−6(−5DT) N44°58.14′ W95°42.62′ TWIN CITIES
1034 B **FUEL** 100LL NOTAM FILE MVE L–12I, 14H
RWY 14–32: H4000X75 (ASPH) S–14, D–18 MIRL 0.4% up NW IAP
RWY 14: REIL. PAPI(P4L).
RWY 32: REIL. PAPI (P4L).
RWY 03–21: 2330X165 (TURF)
RWY 03: Pole.
AIRPORT REMARKS: Attended Mon–Sat 1400–2230Z‡, Sun 1900–2230Z‡. Ultralights on and invof arpt. Rwy 03–21 not plowed winter months. Badger and gopher holes. Rwy 03–21 thlds and edges marked with yellow cones. Rwy 14–32 non frangible cages around REILS. ACTIVATE MIRL Rwy 14–32, REIL and PAPI Rwy 14 and REIL and PAPI Rwy 32—CTAF.
WEATHER DATA SOURCES: AWOS–3 111.6 MVE (320) 269–5830.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.45 (PRINCETON RADIO)
MINNEAPOLIS CENTER APP/DEP CON 125.5
RADIO AIDS TO NAVIGATION: NOTAM FILE MVE.
(T) VORW/DME 111.6 MVE Chan 53 N44°58.36′ W95°42.72′ at fld. 1034/5E. **AWOS–3.** Unmonitored.



MONTZ N43°34.43′ W94°19.08′ NOTAM FILE FRM. OMAHA
NDB (LOM) 420 FQ 311° 6.0 NM to Fairmont Muni.

MOORHEAD MUNI (JKJ) 4 SE UTC−6(−5DT) N46°50.36′ W96°39.84′ TWIN CITIES
918 B S4 **FUEL** 100LL, JET A TPA—1718 (800) NOTAM FILE JKJ L–14G
RWY 12–30: H4300X75 (ASPH) MIRL IAP
RWY 12: REIL. PAPI(P4L). **RWY 30:** REIL. PAPI(P4L).
AIRPORT REMARKS: Attended 1400–2300Z‡. For svc after hrs call 218–287–1400. Self svc fuel avbl with credit card 24 hrs. Arpt underlies Fargo TRSA, Hector Intl Class D Airspace 3 miles NW of arpt. Noise abatement procedures in effect, ctc arpt manager 218–287–1400. ACTIVATE MIRL Rwy 12–30, REIL Rwy 12 and Rwy 30 and PAPI Rwy 12 and Rwy 30—CTAF.
WEATHER DATA SOURCES: AWOS–3 120.0 (218) 287–5049.
COMMUNICATIONS: CTAF/UNICOM 123.0
FARGO APP/DEP CON 120.4 (1200–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.35 (0500–1200Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE FAR.
FARGO (H) VORTACW 116.2 FAR Chan 100 N46°45.20′ W96°51.08′ 047° 9.3 NM to fld. 910/9E. **HIWAS.**



RNAV (GPS) RWY 30

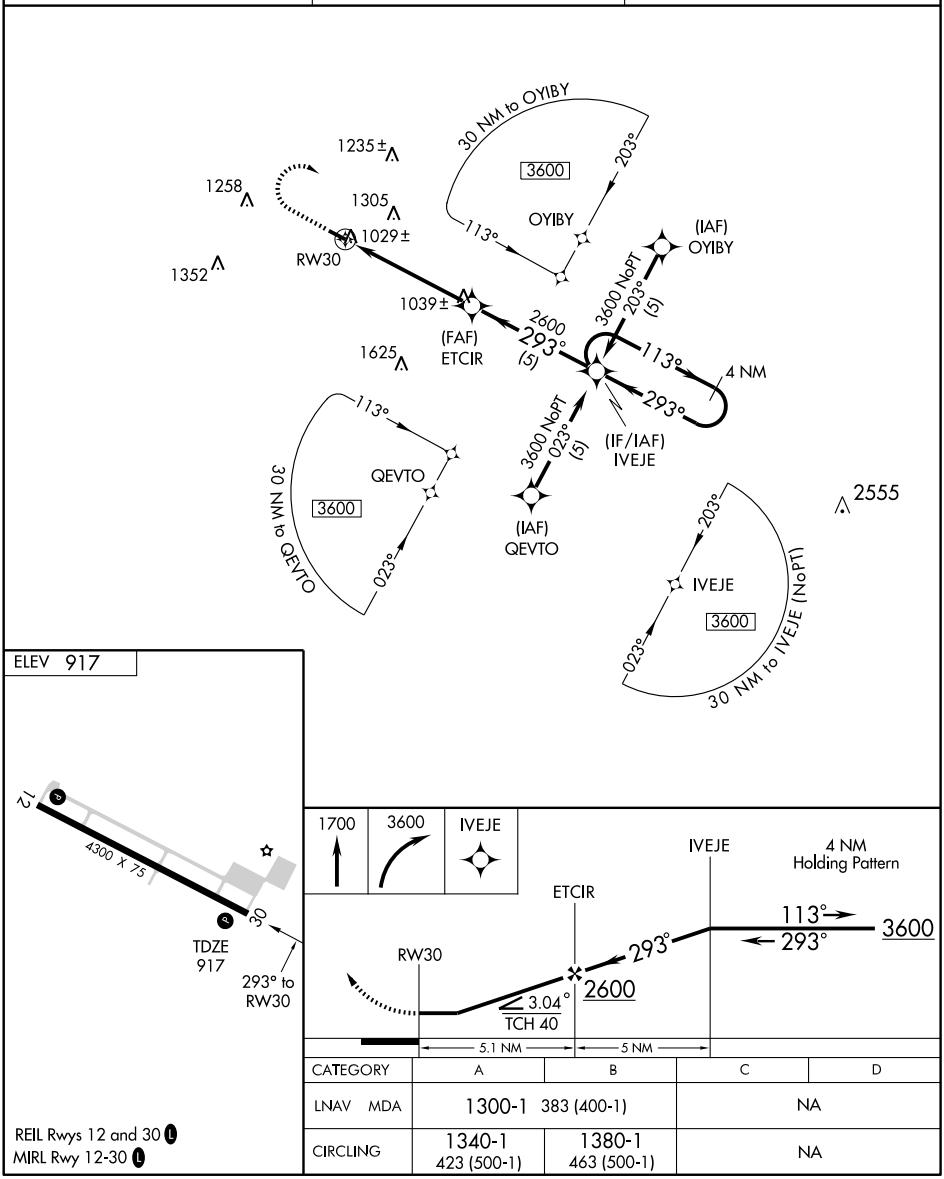
MOORHEAD MUNI (JKJ)

APP CRS	Rwy Idg	4300
293°	TDZE	917
	Apt Elev	917

NA — DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 1700 then climbing right turn to 3600 direct IVEJE WP and hold.

AWOS-3	FARGO APP CON ★	UNICOM
120.0	120.4 377.15	123.0 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	1300-1 383 (400-1)		NA	
CIRCLING	1340-1 423 (500-1)	1380-1 463 (500-1)	NA	

REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

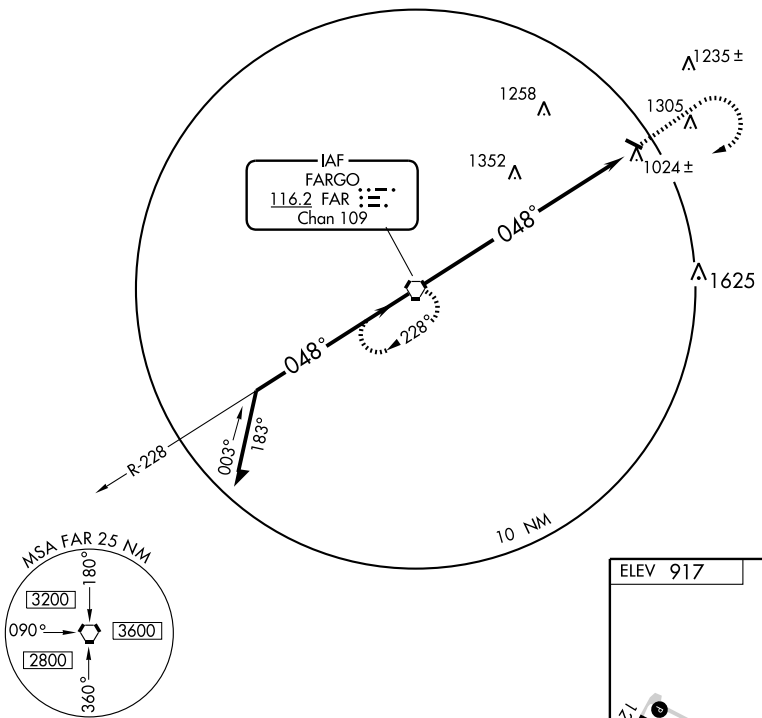
VORTAC FAR 116.2 Chan 109	APP CRS 048°	Rwy Idg N/A TDZE N/A Apt Elev 917

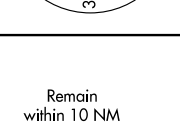
VOR-A

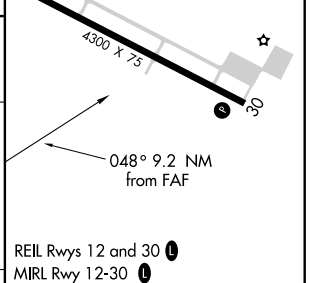
MOORHEAD MUNI (JKJ)

MISSED APPROACH: Climb to 2000, then climbing right turn to 2700 direct FAR VORTAC and hold.

AWOS-3	FARGO APP CON ★	UNICOM
120.0	120.4 377.15	123.0 (CTAF) L







REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

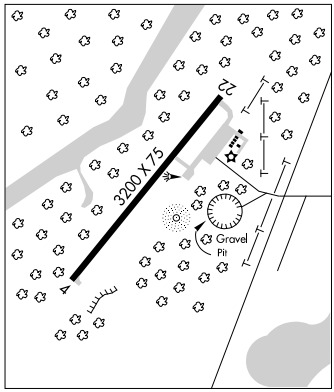
CATEGORY	A	B	C	D
CIRCLING	1580-1 663 (700-1)		NA	

FAF to MAP 9.2 NM					
Knots	60	90	120	150	180
Min:Sec	9:12	6:08	4:36	3:41	3:04

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

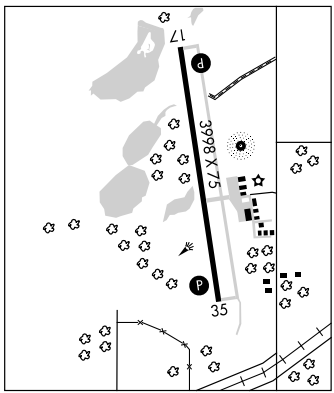
MOOSE LAKE CARLTON CO (MZH) 3 SW UTC−6(−5DT) N46°25.12′ W92°48.29′
1076 B **FUEL** 100LL NOTAM FILE MZH
RWY 04–22: H3200X75 (ASPH) MIRL
RWY 04: REIL. **RWY 22:** REIL.
AIRPORT REMARKS: Unattended. Self svc fuel available 24 hrs with credit card. Ultralights on and invof arpt. MIRL Rwy 04–22 preset to low ints, to increase ints and ACTIVATE REIL Rwy 04 and REIL Rwy 22—CTAF.
WEATHER DATA SOURCES: AWOS–3 362 MZH (218) 485–5199.
COMMUNICATIONS: CTAF 122.9
Ⓡ **DULUTH APP/DEP CON** 125.45 (1200–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.9 (0500–1200Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE DLH.
DULUTH (H) VORTACW 112.6 DLH Chan 73 N46°48.13′ W92°12.17′ 222° 33.9 NM to fld. 1428/5E.
NDB (MHW) 362 MZH N46°24.99′W92°48.29′ at fld.
AWOS–3. NOTAM FILE MZH.

GREEN BAY
L–14I
IAP



MORA MUNI (JMR) 1 NE UTC−6(−5DT) N45°53.16′ W93°16.31′
1012 B **FUEL** 100LL, JET A NOTAM FILE JMR
RWY 17–35: H3998X75 (ASPH) MIRL
RWY 17: REIL. PAPI(P4L)—GA 3.0° TCH 41′. Trees.
RWY 35: REIL. PAPI(P4L)—GA 3.0° TCH 40′. Trees.
AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Waterfowl invof arpt. ACTIVATE MIRL Rwy 17–35, REIL Rwy 17 and Rwy 35, and PAPI Rwy 17 and Rwy 35—CTAF.
WEATHER DATA SOURCES: AWOS–3 327 JMR (320) 679–1629.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.4 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 121.05
RADIO AIDS TO NAVIGATION: NOTAM FILE STC.
ST CLOUD (T) VORW/DME 112.1 STC Chan 58 N45°32.96′ W94°03.52′ 055° 38.9 NM to fld. 1023/3E. VOR unmonitored.
NDB (MHW) 327 JMR N45°53.42′ W93°16.15′ at fld.
AWOS–3. NOTAM FILE JMR.

TWIN CITIES
L–14I
IAP



MOREY'S (See MOTLEY)

GPS RWY 4

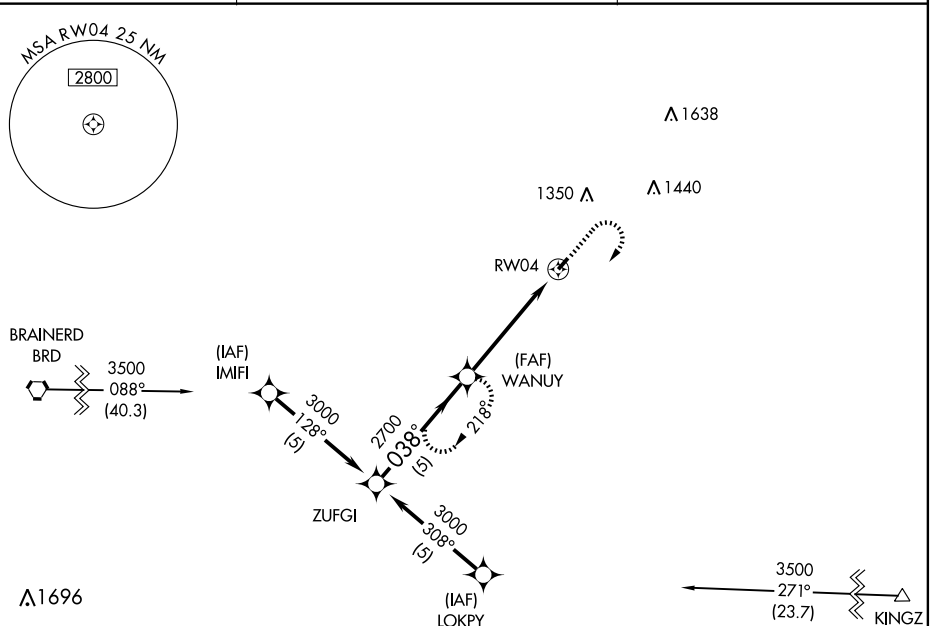
MOOSE LAKE CARLTON COUNTY (MZH)

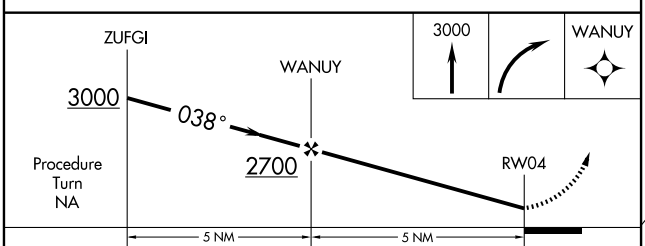
APP CRS	Rwy Idg	3200
038°	TDZE	1076
	Apt Elev	1076

NA

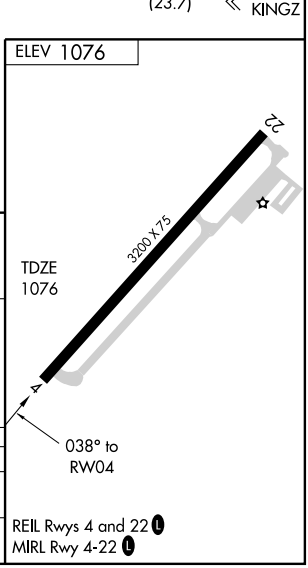
MISSED APPROACH: Climb to 3000 then right turn direct WANUY WP and hold.

AWOS-3	DULUTH APP CON ★	CTAF
362	125.45 255.9	122.9 L





CATEGORY	A	B	C	D
S-4	1540-1	464 (500-1)	NA	
CIRCLING	1660-1	584 (600-1)	NA	



REIL Rwys 4 and 22 L
MIRL Rwy 4-22 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

NDB MZH	APP CRS	Rwy Idg	3200
362	041°	TDZE	1076
		Apt Elev	1076

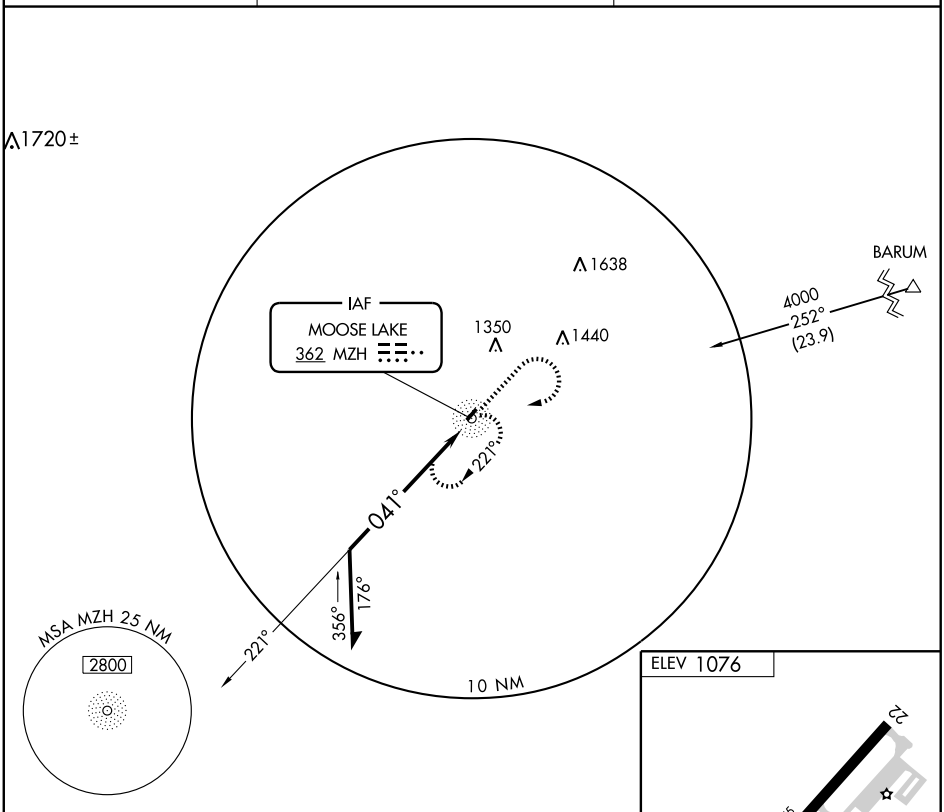
NDB RWY 4

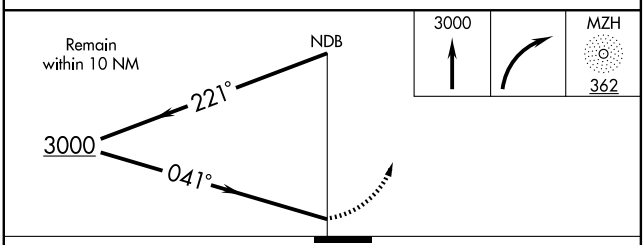
MOOSE LAKE CARLTON COUNTY (MZH)

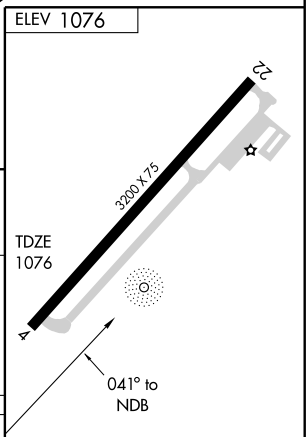
NA

MISSED APPROACH: Climb to 3000, then right turn direct MZH NDB and hold.

AWOS-3	DULUTH APP CON ★	CTAF
362	125.45 255.9	122.9 L







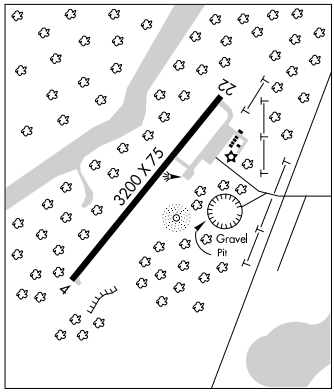
CATEGORY	A	B	C	D
S-4	1800-1	724 (800-1)	NA	
CIRCLING	1800-1	724 (800-1)	NA	

REIL Rwys 4 and 22 L
MIRL Rwy 4-22 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

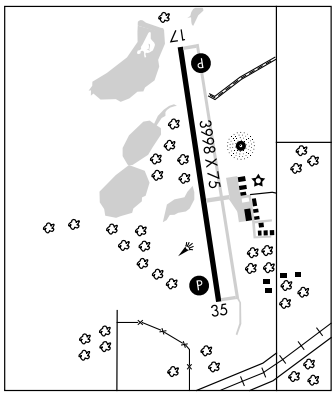
MOOSE LAKE CARLTON CO (MZH) 3 SW UTC−6(−5DT) N46°25.12′ W92°48.29′
1076 B **FUEL** 100LL NOTAM FILE MZH
RWY 04–22: H3200X75 (ASPH) MIRL
RWY 04: REIL. **RWY 22:** REIL.
AIRPORT REMARKS: Unattended. Self svc fuel available 24 hrs with credit card. Ultralights on and invof arpt. MIRL Rwy 04–22 preset to low ints, to increase ints and ACTIVATE REIL Rwy 04 and REIL Rwy 22—CTAF.
WEATHER DATA SOURCES: AWOS–3 362 MZH (218) 485–5199.
COMMUNICATIONS: CTAF 122.9
Ⓡ **DULUTH APP/DEP CON** 125.45 (1200–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.9 (0500–1200Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE DLH.
DULUTH (H) VORTACW 112.6 DLH Chan 73 N46°48.13′ W92°12.17′ 222° 33.9 NM to fld. 1428/5E.
NDB (MHW) 362 MZH N46°24.99′W92°48.29′ at fld.
AWOS–3. NOTAM FILE MZH.

GREEN BAY
L–14I
IAP



MORA MUNI (JMR) 1 NE UTC−6(−5DT) N45°53.16′ W93°16.31′
1012 B **FUEL** 100LL, JET A NOTAM FILE JMR
RWY 17–35: H3998X75 (ASPH) MIRL
RWY 17: REIL. PAPI(P4L)—GA 3.0° TCH 41′. Trees.
RWY 35: REIL. PAPI(P4L)—GA 3.0° TCH 40′. Trees.
AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Waterfowl invof arpt. ACTIVATE MIRL Rwy 17–35, REIL Rwy 17 and Rwy 35, and PAPI Rwy 17 and Rwy 35—CTAF.
WEATHER DATA SOURCES: AWOS–3 327 JMR (320) 679–1629.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.4 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 121.05
RADIO AIDS TO NAVIGATION: NOTAM FILE STC.
ST CLOUD (T) VORW/DME 112.1 STC Chan 58 N45°32.96′ W94°03.52′ 055° 38.9 NM to fld. 1023/3E. VOR unmonitored.
NDB (MHW) 327 JMR N45°53.42′ W93°16.15′ at fld.
AWOS–3. NOTAM FILE JMR.

TWIN CITIES
L–14I
IAP



MOREY'S (See MOTLEY)

NDB JMR	APP CRS	Rwy Idg	3998
327	355°	TDZE	1008
		Apt Elev	1012

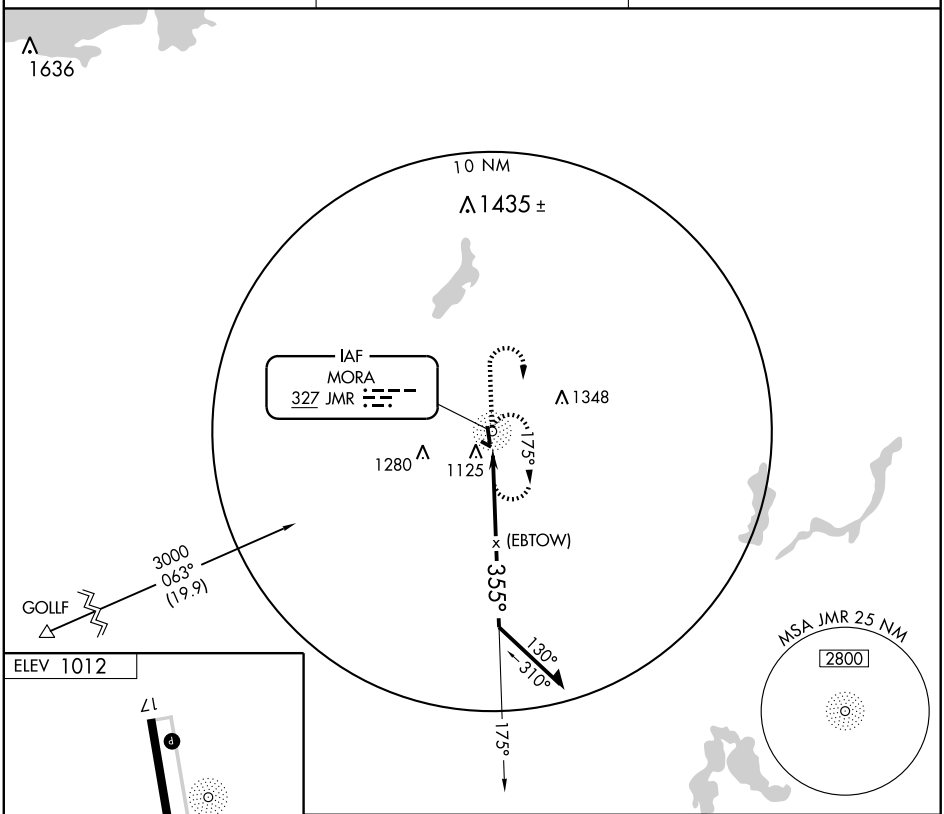
NDB or GPS RWY 35

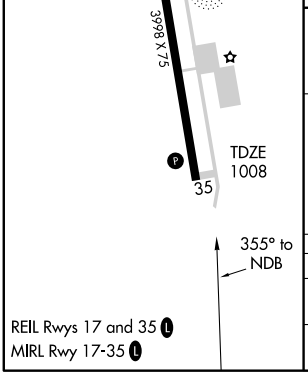
MORA MUNI (JMR)

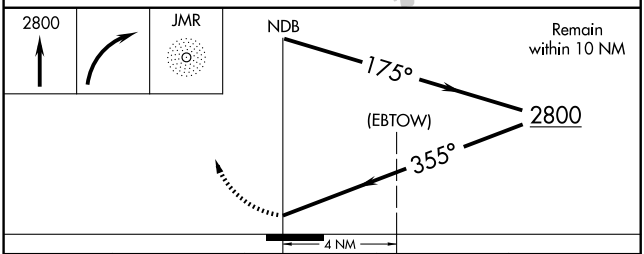
NA

MISSED APPROACH: Climb to 2800 then right turn direct JMR NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
327	121.05 397.9	122.8 (L)







CATEGORY	A	B	C	D
S-35	1500-1	492 (500-1)	1500-1¼ 492 (500-1¼)	1500-1½ 492 (500-1½)
CIRCLING	1500-1	488 (500-1)	1500-1½ 488 (500-1½)	1640-2 628 (700-2)

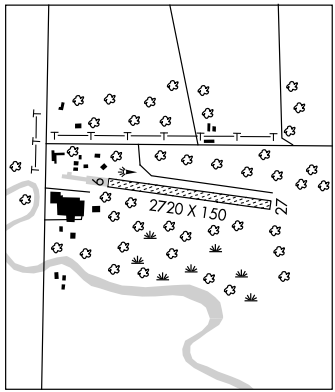
REIL Rwys 17 and 35 (L)
MIRL Rwy 17-35 (L)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

MORRIS MUNI–CHARLIE SCHMIDT FLD (MOX) 3 SW UTC−6(−5DT) N45°33.96′ W95°58.03′ **TWIN CITIES**
1138 B S4 **FUEL** 100LL, JET A NOTAM FILE MOX **L–14H**
RWY 14–32: H4000X75 (ASPH) S–14, D–19 MIRL **IAP**
RWY 14: REIL. PAPI(P2L). **RWY 32:** REIL. PAPI(P2L).
RWY 04–22: 2640X150 (TURF) 0.6% up NE
RWY 04: Road. **RWY 22:** Road.
AIRPORT REMARKS: Attended Mon–Fri 1500–2300Z‡. Fuel 24 hour credit card svc avbl. Rwy 04–22 CLOSED winter months. Ultralight tfc on and invof arpt. Rwy 04–22 not plowed winter months. Deer and waterfowl on and invof arpt. Fld conditions not updated ngts/weekends winter months. Rwy 04–22 marked with yellow cones. ACTIVATE MIRL Rwy 14–32 and REIL Rwy 14 and Rwy 32 and PAPI Rwy 14 and Rwy 32—CTAF.
WEATHER DATA SOURCES: AWOS–3 109.6 MOX (320) 589–1303.
COMMUNICATIONS: CTAF/UNICOM 122.8
MINNEAPOLIS CENTER APP/DEP CON 126.1
RCO 122.25 (PRINCETON RADIO)
RADIO AIDS TO NAVIGATION: NOTAM FILE MOX.
(T) VORW/DME 109.6 MOX Chan 33 N45°33.95′ W95°58.15′ at fld. 1132/5E. **AWOS–3**. VOR/DME unmonitored.

MOTLEY

MOREY'S (22Y) 1 S UTC−6(−5DT) N46°19.41′ W94°38.32′ **TWIN CITIES**
1225 NOTAM FILE PNM **L–14H**
RWY 09–27: 2720X150 (TURF) **IAP**
RWY 09: Trees. **RWY 27:** Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–0000Z‡, Sat–Sun 1400–0100Z‡. Arpt CLOSED when snow covered, confirm conditions with arpt manager on 218–352–6600. Lgtd and marked 1533′ MSL tower 1.3 NM west of arpt. Rwy 09–27 marked with yellow cones.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 118.05



MURDOCK MUNI (23Y) 0 S UTC−6(−5DT) N45°13.33′ W95°24.07′ **TWIN CITIES**
1082 NOTAM FILE PNM
RWY 12–30: 3415X150 (TURF)
AIRPORT REMARKS: Unattended. Arpt CLOSED winter months. Rwy 12–30 marked with cones.
COMMUNICATIONS: CTAF 122.9

MYERS FLD (See CANBY)

RNAV (GPS) RWY 14

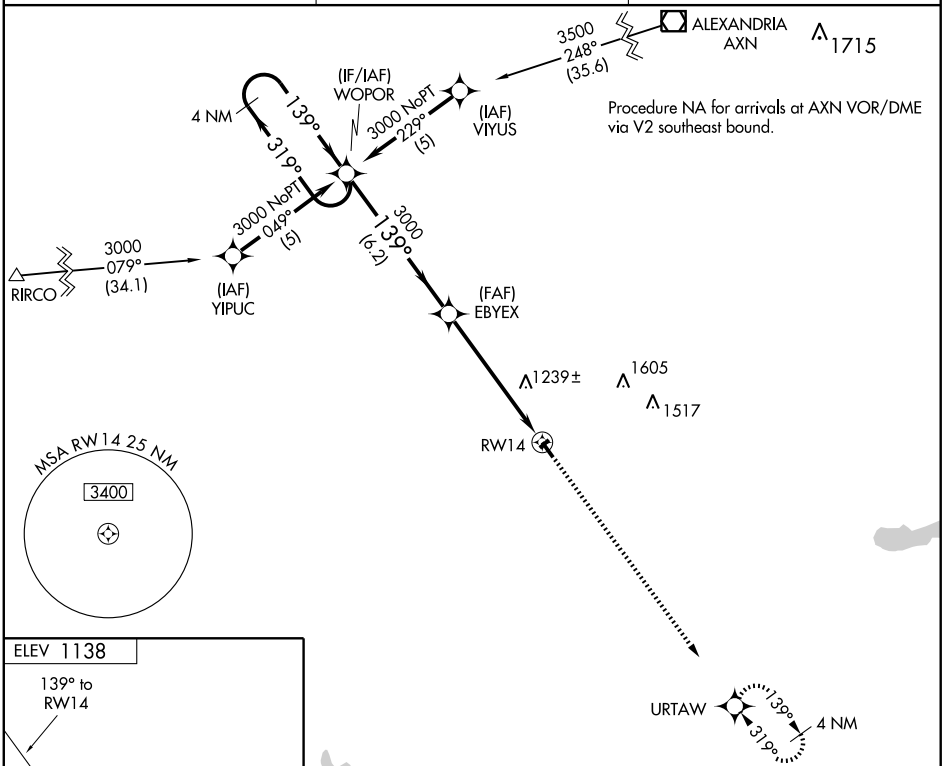
MORRIS MUNI-CHARLIE SCHMIDT FIELD (MOX)

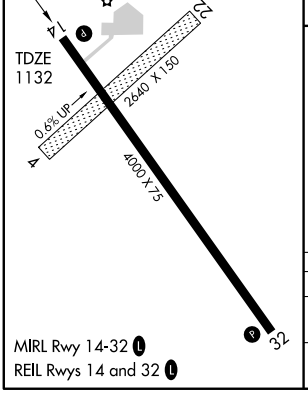
APP CRS	Rwy Idg	4000
139°	TDZE	1132
	Apt Elev	1138

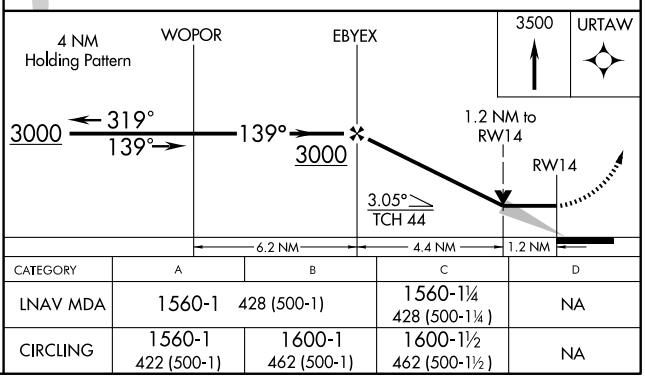
DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Benson altimeter setting and increase all MDA 60 feet.
VDP NA when using Benson altimeter setting.

MISSED APPROACH: Climb to 3500 direct URTAW and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
109.6	126.1 269.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1560-1 428 (500-1)		1560-1¼ 428 (500-1¼)	NA
CIRCLING	1560-1 422 (500-1)	1600-1 462 (500-1)	1600-1½ 462 (500-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 32

MORRIS MUNI-CHARLIE SCHMIDT FIELD (MOX)

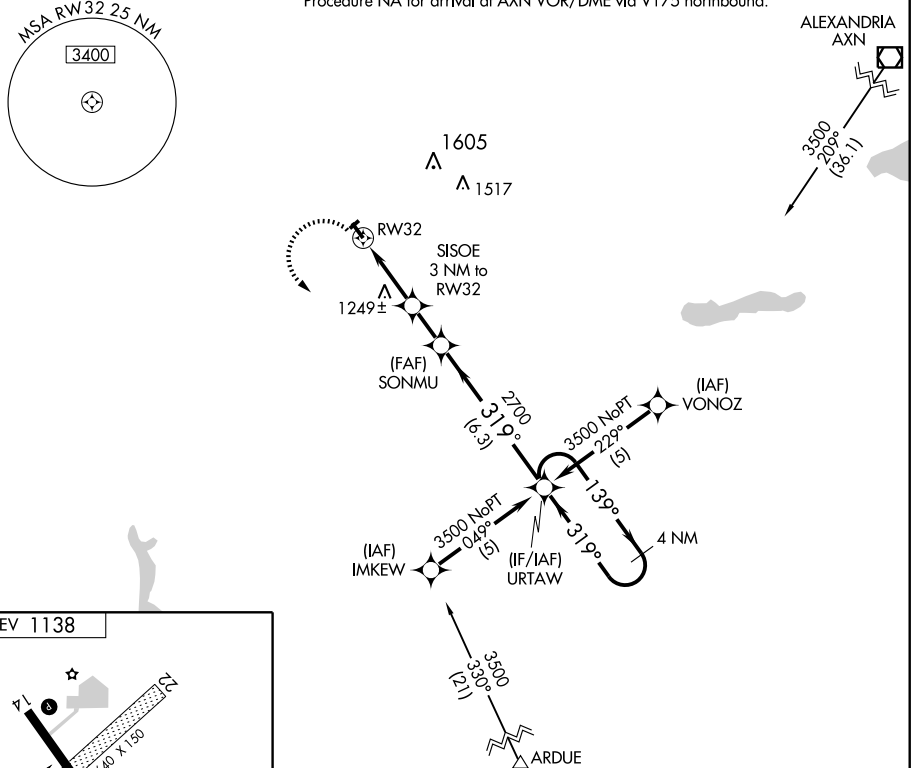
APP CRS	Rwy Idg	4000
319°	TDZE	1132
	Apt Elev	1138

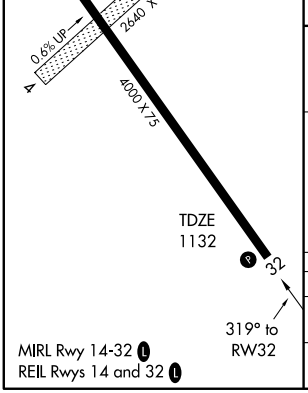
DME/DME RNP-0.3 NA.
VDP NA when using Benson altimeter setting.
When local altimeter setting not received, use Benson altimeter setting and increase all MDAs 60 feet.

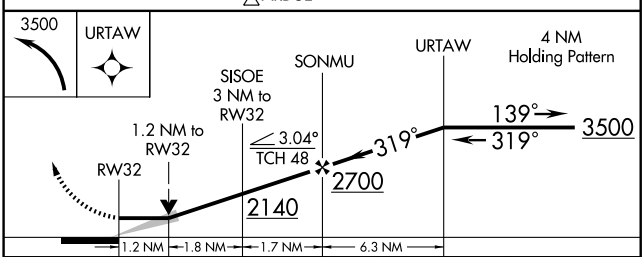
MISSED APPROACH: Climbing left turn to 3500 direct URTAW and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
109.6	126.1 269.2	122.8 (CTAF) L

Procedure NA for arrival at AXN VOR/DME via V175 northbound.







CATEGORY	A	B	C	D
LNAV MDA	1540-1 408 (500-1)		1540-1¼ 408 (500-1¼)	NA
CIRCLING	1560-1 422 (500-1)	1600-1 462 (500-1)	1600-1½ 462 (500-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME MOX	APP CRS	Rwy Idg	4000
109.6	144°	TDZE	1132
Chan 33		Apt Elev	1138

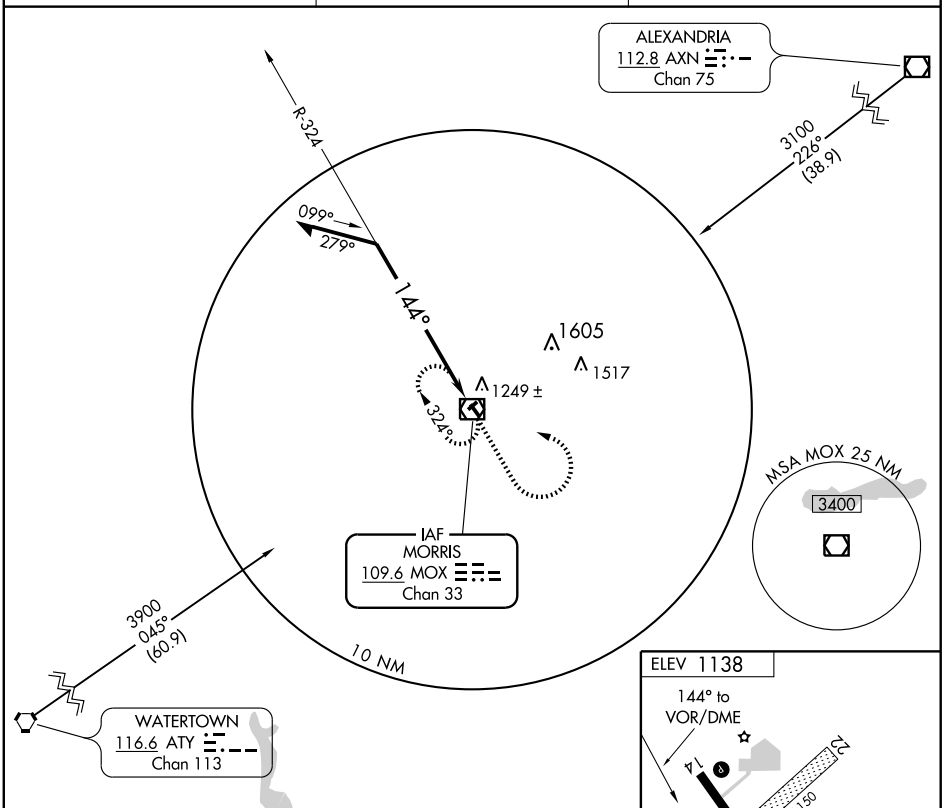
VOR RWY 14

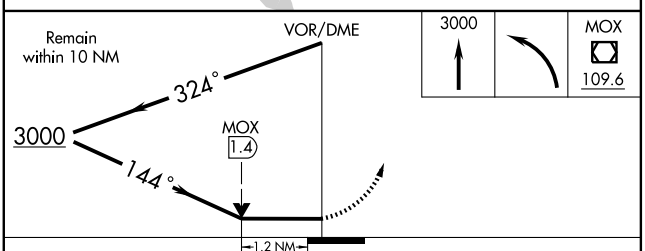
MORRIS MUNI-CHARLIE SCHMIDT FIELD (MOX)

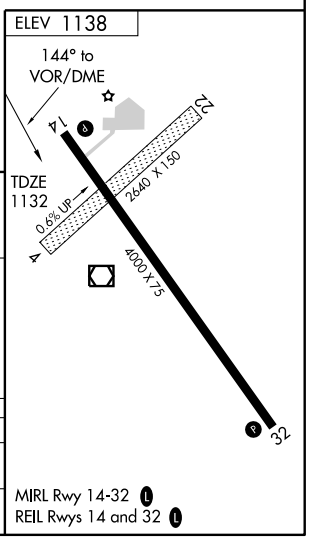
When local altimeter setting not received, use Benson altimeter setting and increase all MDA 60 feet.
VDP NA when using Benson altimeter setting.

MISSED APPROACH: Climb to 3000 then left turn direct MOX VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
109.6	126.1 269.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-14	1560-1	428 (500-1)	1560-1¼ 428 (500-1¼)	NA
CIRCLING	1560-1 422 (500-1)	1600-1 462 (500-1)	1600-1½ 462 (500-1½)	NA

MIRL Rwy 14-32 L
REIL Rwys 14 and 32 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME MOX 109.6 Chan 33	APP CRS 315°	Rwy Idg 4000 TDZE 1132 Apt Elev 1138

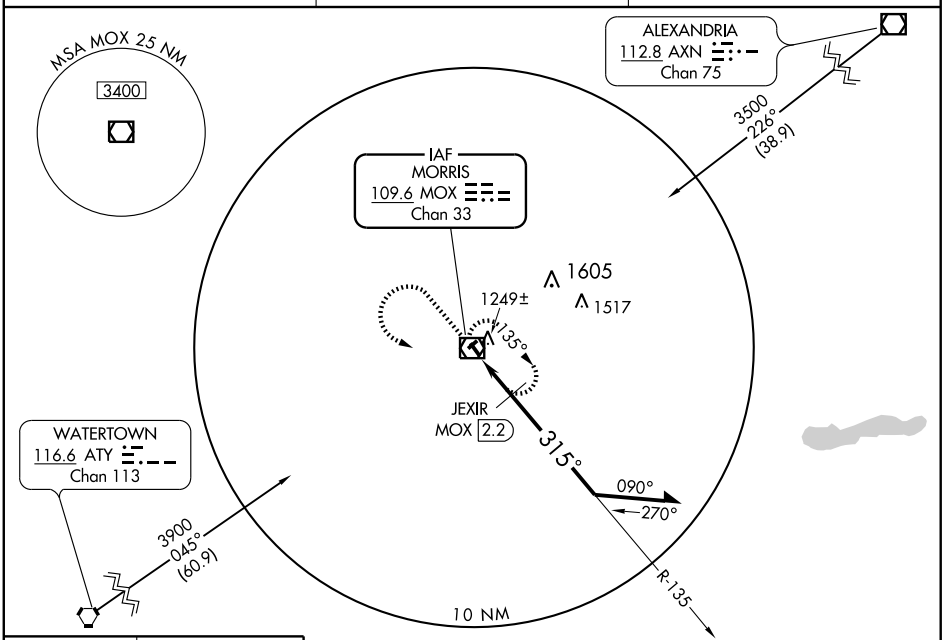
VOR RWY 32

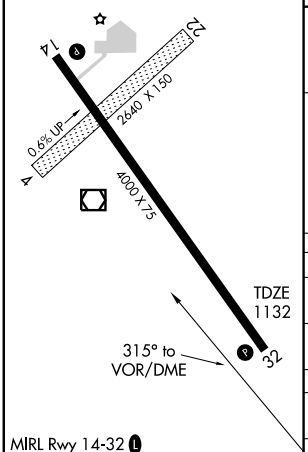
MORRIS MUNI-CHARLIE SCHMIDT FIELD (MOX)

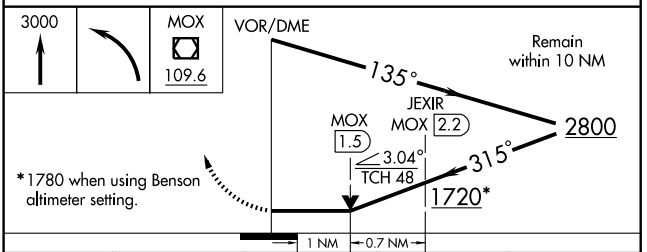
VDP NA when using Benson altimeter setting.
When local altimeter setting not received, use Benson altimeter setting and increase all MDAs 60 feet, and Cat. C visibility ¼ mile, JEXIR FIX MINIMUMS S-32 Cat. C visibility ¼ mile.

MISSED APPROACH: Climb to 3000 then left turn direct MOX VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
109.6	126.1 269.2	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-32	1720-1 588 (600-1)		1720-1½ 588 (600-1½)	NA
CIRCLING	1720-1 582 (600-1)		1720-1½ 582 (600-1½)	NA
JEXIR FIX MINIMUMS				
S-32	1500-1 368 (400-1)			NA
CIRCLING	1560-1 422 (500-1)	1600-1 462 (500-1)	1600-1½ 462 (500-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

NARY NATIONAL–SHEFLAND FLD (5C3) 3 NE UTC–6(–5DT) N47°22.52′ W94°47.93′ TWIN CITIES L–14H

1389 B **FUEL** 100LL, JET A NOTAM FILE PNM

RWY 17–35: H3850X60 (ASPH) LIRL (NSTD)

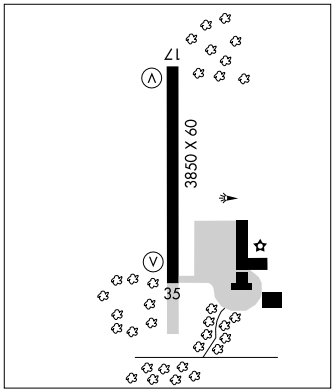
RWY 17: VASI(V2R). Trees. **RWY 35:** VASI(V2L). Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED indef. Deer on and invof arpt. Rwy 17–35 NSTD LIRL, lights 3′ above grade and 10′ from rwy edge. ACTIVATE NSTD LIRL Rwy 17–35—122.9.

COMMUNICATIONS: CTAF/UNICOM 122.8

RADIO AIDS TO NAVIGATION: NOTAM FILE BJI.

BEMIDJI (L) VORTACW 108.6 BJI Chan 23 N47°34.55′ W95°01.49′ 138° 15.1 NM to fld. 1410/4E. **HIWAS.**



NEW ULM MUNI (ULM) 2 W UTC–6(–5DT) N44°19.19′ W94°30.14′ OMAHA L–12I IAP

1011 B S4 **FUEL** 100LL, JET A NOTAM FILE ULM

RWY 15–33: H4401X75 (ASPH) MIRL

RWY 15: REIL. PAPI(P4L)—GA 3.0° TCH 40′. Road.

RWY 33: REIL. ODALS. PAPI(P4R)—GA 3.0° TCH 38′. Road.

RWY 04–22: 2480X160 (TURF)

RWY 22: Road.

AIRPORT REMARKS: Attended Mon–Sat dawn–dusk, Sun 1800–2300Z‡. For svc after hrs call 507–359–1966. Rwy 04–22 CLOSED winter months. Ultralight tfc on and invof arpt. Rwy 04–22 marked with yellow cones. ACTIVATE MIRL Rwy 15–33, REIL Rwy 15 and Rwy 33, ODALS Rwy 33 and PAPI Rwy 15 and Rwy 33—122.8.

WEATHER DATA SOURCES: AWOS–3 118.325 (507) 359–1656.

COMMUNICATIONS: CTAF/UNICOM 122.8

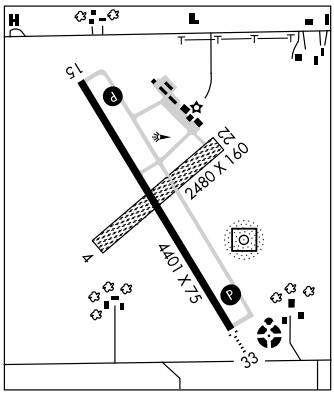
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.1

GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE MKT.

MANKATO (L) VOR/DME 110.8 MKT Chan 45 N44°13.19′ W93°54.74′ 276° 26.1 NM to fld. 1026/7E.

NDB/DME (MHW) 272 ULM Chan 50 N44°19.08′ W94°29.88′ at fld. DME Chan 50 paired with VHF frequency 111.30. NOTAM FILE ULM.



NEW YORK MILLS MUNI (25Y) 2 SE UTC–6(–5DT) N46°30.13′ W95°20.25′ TWIN CITIES

1401 B NOTAM FILE PNM

RWY 12–30: 2500X196 (TURF) LIRL (NSTD)

RWY 12: Road. **RWY 30:** Trees.

AIRPORT REMARKS: Unattended. Arpt CLOSED indef. Arpt CLOSED winter months. Rwy 12–30 marked with yellow cones. Rwy 12–30 NSTD LIRL, spacing irregular.

COMMUNICATIONS: CTAF 122.9

NODINE N43°54.74′ W91°28.05′ NOTAM FILE PNM. CHICAGO H–2I, L–28F

(H) VORTAC 117.9 ODI Chan 126 249° 16.8 NM to Rushford Muni. 1282/1E.

RCO 122.1R 117.9T (PRINCETON RADIO)

NORMAN CO ADA–TWIN VALLEY (See ADA–TWIN VALLEY)

NORTH COUNTRY SPB (See DULUTH)

NDB/DME ULM	APP CRS	Rwy Idg	4401
272	140°	TDZE	1005
Chan 50 (111.3)		Apt Elev	1011

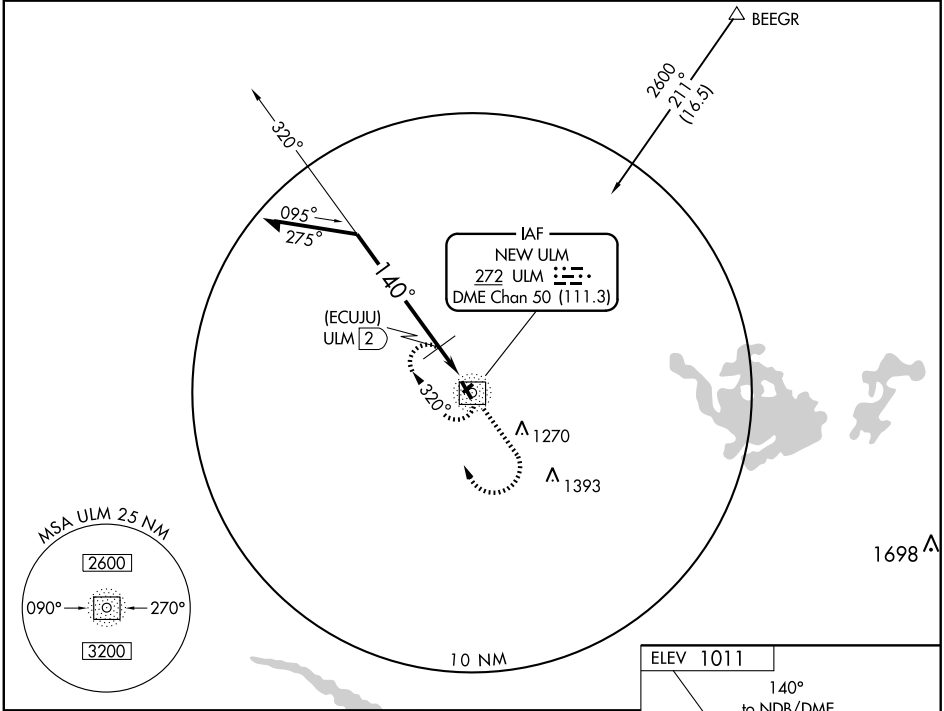
NDB or GPS RWY 15

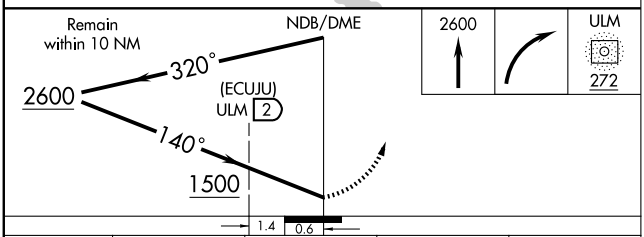
NEW ULM MUNI (ULM)

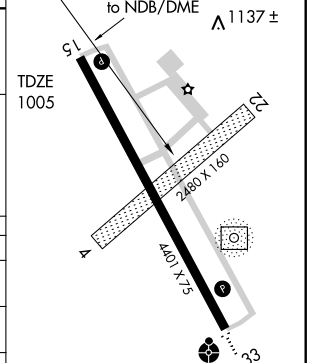
NA

MISSED APPROACH: Climb to 2600 then right turn direct ULM NDB/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.325	127.1 290.2	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-15	1500-1	495 (500-1)	1500-1¼ 495 (500-1¼)	1500-1½ 495 (500-1½)
CIRCLING	1500-1	489 (500-1)	1500-1½ 489 (500-1½)	1740-2¼ 729 (800-2¼)
DME MINIMUMS				
S-15	1440-1	435 (500-1)	1440-1¼ 435 (500-1¼)	1440-1½ 435 (500-1½)
CIRCLING	1440-1 429 (500-1)	1480-1 469 (500-1)	1480-1½ 469 (500-1½)	1740-2¼ 729 (800-2¼)

REIL Rwys 15 and 33 L
MIRL Rwy 15-33 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

NDB/DME ULM 272 Chan 50 (111.3)	APP CRS 354°	Rwy Idg 4401 TDZE 1011 Apt Elev 1011

NDB or GPS RWY 33

NEW ULM MUNI (ULM)

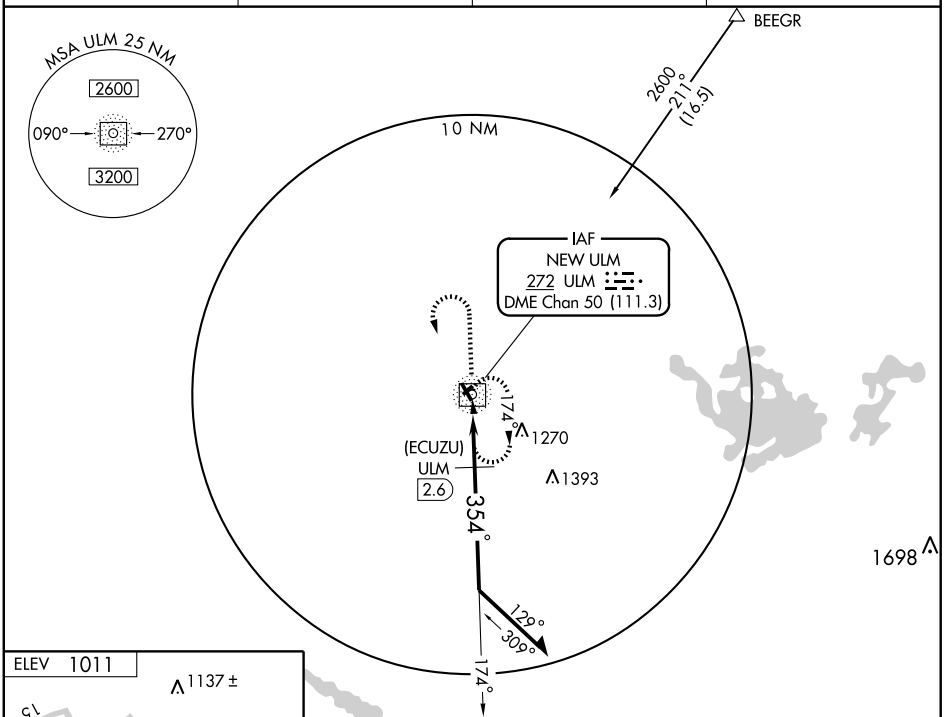
Inoperative table does not apply to S-33 Cats C and D.

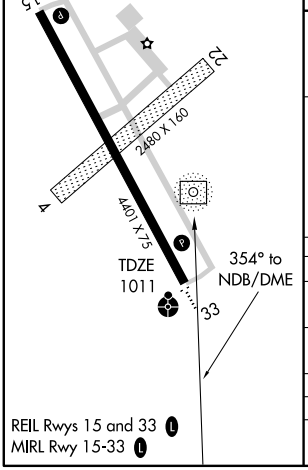
NA

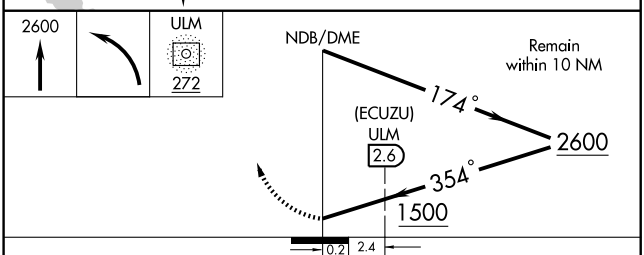
ODALS

MISSED APPROACH: Climb to 2600 then left turn direct ULM NDB/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.325	127.1 290.2	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-33	1500-¾ 489 (500-¾)		1500-1¼ 489 (500-1¼)	1500-1½ 489 (500-1½)
CIRCLING	1500-1 489 (500-1)		1500-1½ 489 (500-1½)	1740-2¼ 729 (800-2¼)
DME MINIMUMS				
S-33	1420-¾ 409 (500-¾)		1420-1¼ 409 (500-1¼)	
CIRCLING	1440-1 429 (500-1)	1480-1 469 (500-1)	1480-1½ 469 (500-1½)	1740-2¼ 729 (800-2¼)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

NORTHOME MUNI (43Y) 2 NE UTC−6(−5DT) N47°53.29′ W94°15.52′ **TWIN CITIES**

1427 B TPA—2427(1000) NOTAM FILE PNM

RWY 12–30: 3199X147 (TURF) LIRL (NSTD)

RWY 12: Trees. **RWY 30:** Trees.

RWY 02–20: 2201X148 (TURF)

RWY 02: Trees. **RWY 20:** Thld dsplcd 150′. Trees.

AIRPORT REMARKS: Unattended. Rwy 02–20 CLOSED winter months. Rwy 12–30 SE 800′ soft and uneven. Rwy 02–20 and dsplcd thld marked with yellow cones. Rwy 12–30 marked with yellow cones. Rwy 12–30 NSTD LIRL variable spacing.

COMMUNICATIONS: CTAF 122.9

OLIVIA RGNL (OVL) 2 W UTC−6(−5DT) N44°46.71′ W95°01.97′ **TWIN CITIES**

1076 B S3 **FUEL** 100LL NOTAM FILE OVL **L–12I, 14H**

RWY 11–29: H3498X75 (ASPH) LIRL **IAP**

RWY 11: Tree. **RWY 29:** Tree.

AIRPORT REMARKS: Attended Apr–Oct 1400–2300Z‡. Nov–Mar Mon–Fri 1400–2300Z‡, Nov–Mar Sat 1400–1800Z‡. For service after hrs call 320–523–5842 or 320–235–3397. Windsock unreliable. Trees obstruct SE.

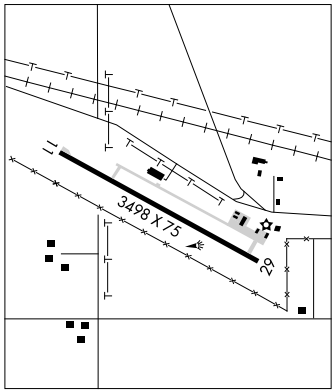
WEATHER DATA SOURCES: AWOS–3 119.275 (320) 523–5924.

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.1

RADIO AIDS TO NAVIGATION: NOTAM FILE RWF.

REDWOOD FALLS (H) VORW/DME 113.3 RWF Chan 80
N44°28.04′ W95°07.69′ 005° 19.1 NM to fld.
1061/7E. **HIWAS.**



ORR RGNL (ORB) 3 SW UTC−6(−5DT) N48°00.96′ W92°51.36′ **GREEN BAY**

1311 B **FUEL** 100LL, JET A NOTAM FILE ORB **L–14I**

RWY 13–31: H4001X75 (ASPH) MIRL **IAP**

RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 20′.

RWY 31: REIL. PAPI(P4L)—GA 3.0° TCH 20′. Trees.

AIRPORT REMARKS: Attended 1500–2200Z‡. Fuel available 24 hrs with credit card. Birds and wildlife on and invof arpt. Ultralight activity on and invof arpt. Rwy 13–31 grass and ground were showing through previously sealed cracks on the runway, ramp and twys. ACTIVATE MIRL Rwy 13–31, REIL Rwy 13 and Rwy 31 and PAPI Rwy 13 and Rwy 31—CTAF.

WEATHER DATA SOURCES: AWOS–3 118.325 (218) 757–3169.

COMMUNICATIONS: CTAF/UNICOM 122.8

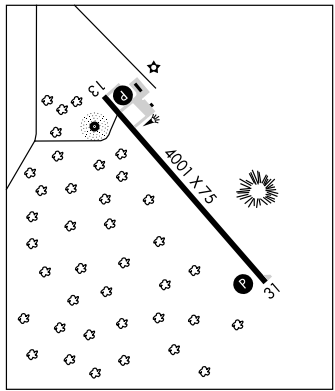
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 120.9

GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE INL.

INTERNATIONAL FALLS (L) VORTACW 111.0 INL Chan 47
N48°33.95′ W93°24.34′ 140° 39.7 NM to fld.
1180/6E. **HIWAS.**

NDB (MHW) 341 ORB N48°01.11′ W92°51.69′ at fld.
NOTAM FILE ORB. Unmonitored.



AL-6301 (FAA)

RNAV (GPS) RWY 29

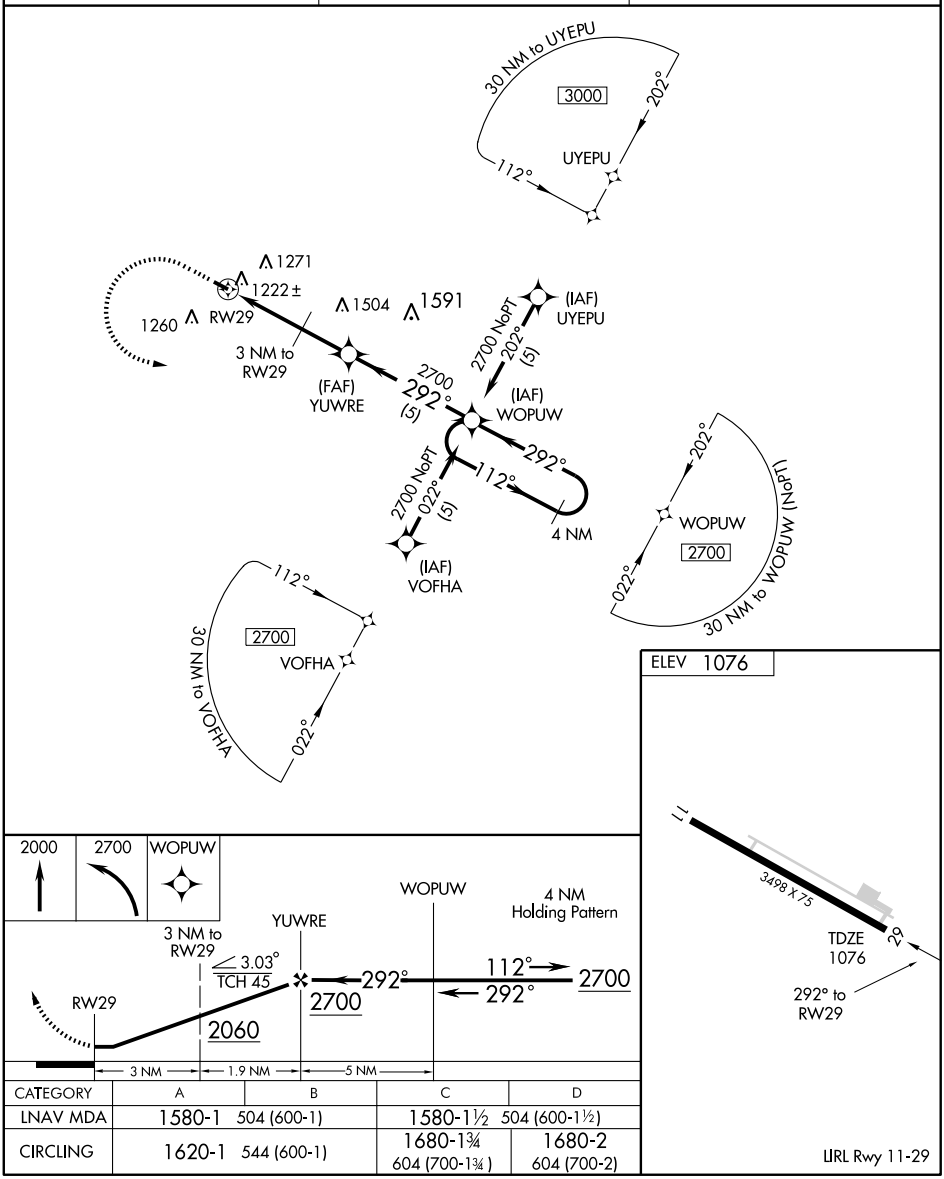
OLIVIA RGNL (OVL)

APP CRS	Rwy Idg	3498
292°	TDZE	1076
	Apt Elev	1076

Use Redwood Falls altimeter setting.
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 2000 then climbing left turn to 2700 direct WOPUW WP and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	127.1 290.2	122.8 (CTAF)



CATEGORY	A	B	C	D
LNAV MDA	1580-1 504 (600-1)		1580-1½ 504 (600-1½)	
CIRCLING	1620-1 544 (600-1)		1680-1¾ 604 (700-1¾)	1680-2 604 (700-2)

LIRL Rwy 11-29

44° 47′ N-95° 02′ W

NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME RWF	APP CRS	Rwy Idg	N/A
113.3	005°	TDZE	N/A
Chan 80		Apt Elev	1076

VOR/DME or GPS-A

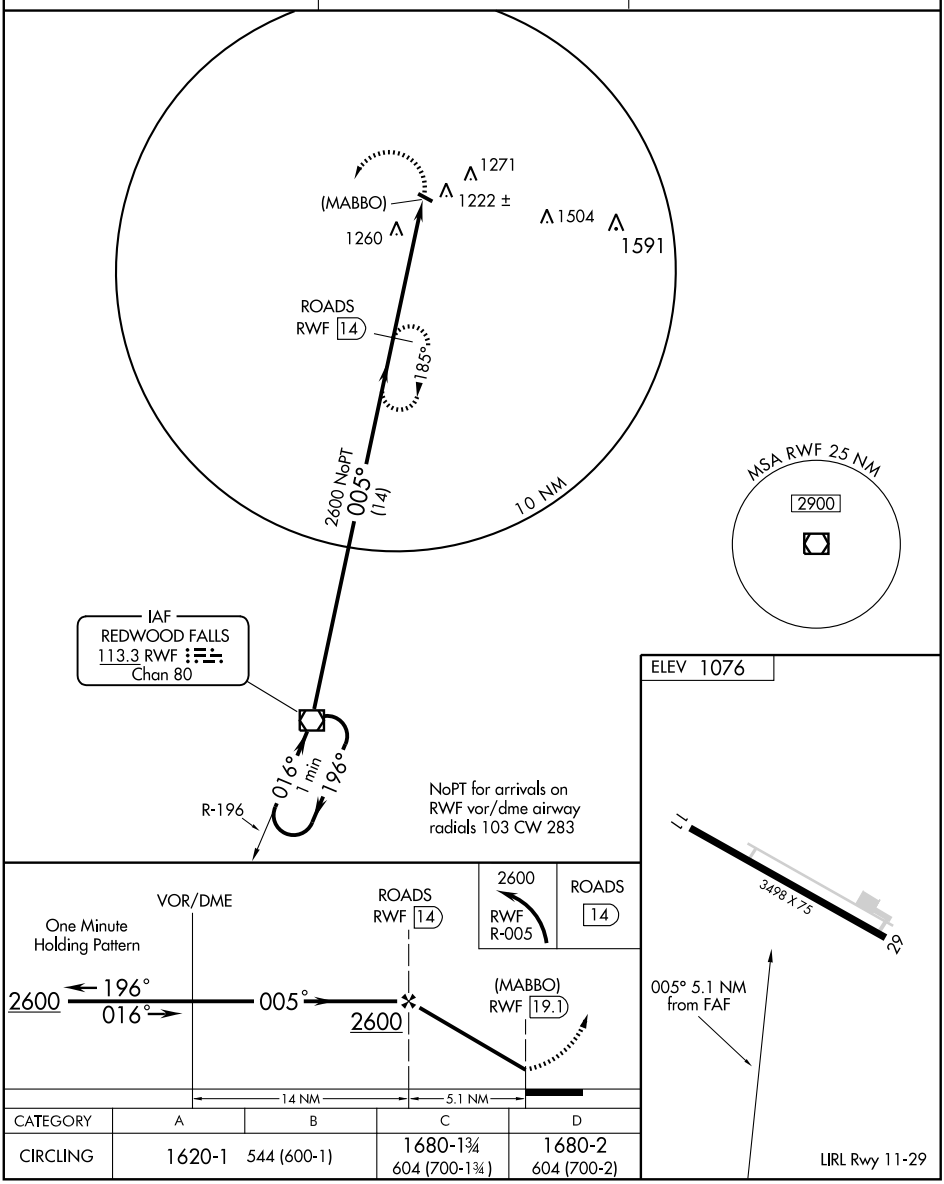
OLIVIA RGNL (OVL)

NA

Use Redwood Falls, MN altimeter setting.

MISSED APPROACH: Climbing left turn to 2600 via RWF R-005 to ROADS 14 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.275	127.1 290.2	122.8 (CTAF)



CATEGORY	A	B	C	D
CIRCLING	1620-1	544 (600-1)	1680-1¾ 604 (700-1¾)	1680-2 604 (700-2)

44°47′N-95°02′W

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

NORTHOME MUNI (43Y) 2 NE UTC−6(−5DT) N47°53.29′ W94°15.52′ **TWIN CITIES**

1427 B TPA—2427(1000) NOTAM FILE PNM

RWY 12–30: 3199X147 (TURF) LIRL (NSTD)

RWY 12: Trees. **RWY 30:** Trees.

RWY 02–20: 2201X148 (TURF)

RWY 02: Trees. **RWY 20:** Thld dsplcd 150′. Trees.

AIRPORT REMARKS: Unattended. Rwy 02–20 CLOSED winter months. Rwy 12–30 SE 800′ soft and uneven. Rwy 02–20 and dsplcd thld marked with yellow cones. Rwy 12–30 marked with yellow cones. Rwy 12–30 NSTD LIRL variable spacing.

COMMUNICATIONS: CTAF 122.9

OLIVIA RGNL (OVL) 2 W UTC−6(−5DT) N44°46.71′ W95°01.97′ **TWIN CITIES**

1076 B S3 **FUEL** 100LL NOTAM FILE OVL **L–12I, 14H**

RWY 11–29: H3498X75 (ASPH) LIRL **IAP**

RWY 11: Tree. **RWY 29:** Tree.

AIRPORT REMARKS: Attended Apr–Oct 1400–2300Z‡. Nov–Mar Mon–Fri 1400–2300Z‡, Nov–Mar Sat 1400–1800Z‡. For service after hrs call 320–523–5842 or 320–235–3397. Windsock unreliable. Trees obstruct SE.

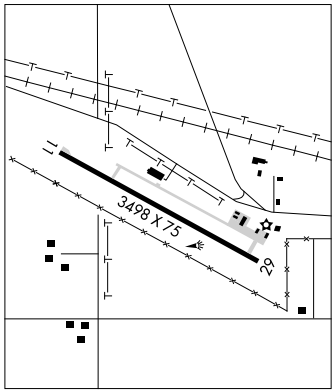
WEATHER DATA SOURCES: AWOS–3 119.275 (320) 523–5924.

COMMUNICATIONS: CTAF/UNICOM 122.8

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.1

RADIO AIDS TO NAVIGATION: NOTAM FILE RWF.

REDWOOD FALLS (H) VORW/DME 113.3 RWF Chan 80
N44°28.04′ W95°07.69′ 005° 19.1 NM to fld.
1061/7E. **HIWAS.**



ORR RGNL (ORB) 3 SW UTC−6(−5DT) N48°00.96′ W92°51.36′ **GREEN BAY**

1311 B **FUEL** 100LL, JET A NOTAM FILE ORB **L–14I**

RWY 13–31: H4001X75 (ASPH) MIRL **IAP**

RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 20′.

RWY 31: REIL. PAPI(P4L)—GA 3.0° TCH 20′. Trees.

AIRPORT REMARKS: Attended 1500–2200Z‡. Fuel available 24 hrs with credit card. Birds and wildlife on and invof arpt. Ultralight activity on and invof arpt. Rwy 13–31 grass and ground were showing through previously sealed cracks on the runway, ramp and twys. ACTIVATE MIRL Rwy 13–31, REIL Rwy 13 and Rwy 31 and PAPI Rwy 13 and Rwy 31—CTAF.

WEATHER DATA SOURCES: AWOS–3 118.325 (218) 757–3169.

COMMUNICATIONS: CTAF/UNICOM 122.8

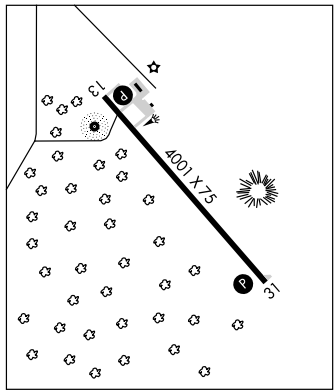
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 120.9

GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE INL.

INTERNATIONAL FALLS (L) VORTACW 111.0 INL Chan 47
N48°33.95′ W93°24.34′ 140° 39.7 NM to fld.
1180/6E. **HIWAS.**

NDB (MHW) 341 ORB N48°01.11′ W92°51.69′ at fld.
NOTAM FILE ORB. Unmonitored.



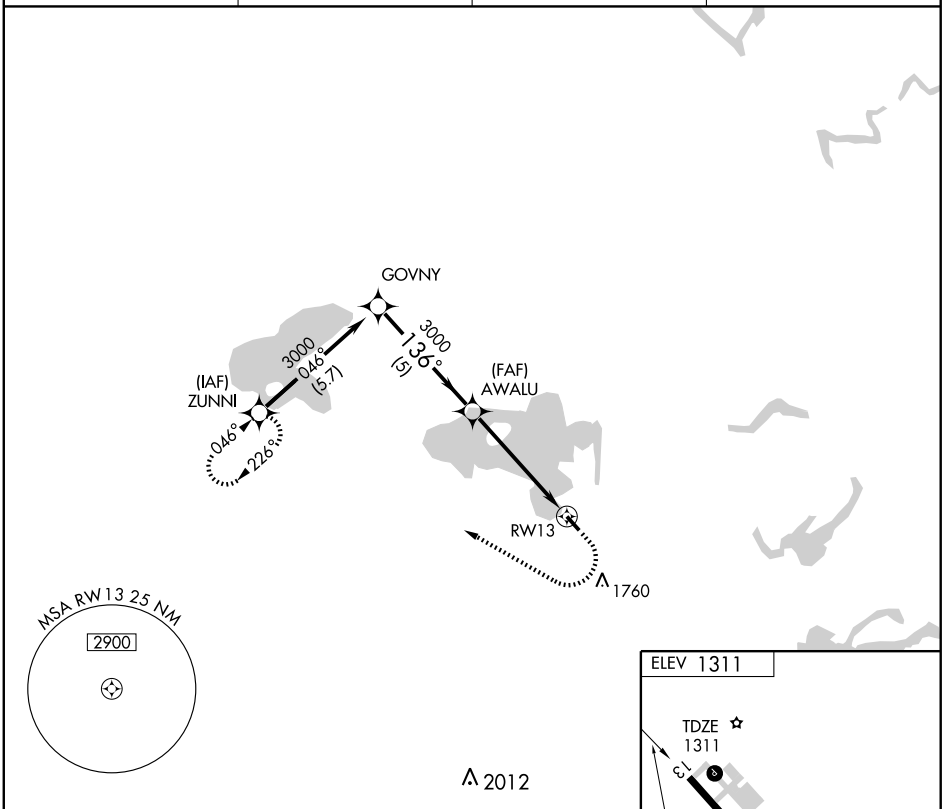
APP CRS	Rwy Idg	4001
136°	TDZE	1311
	Apt Elev	1311

GPS RWY 13
ORR RGNL(ORB)

NA

MISSED APPROACH: Climb to 2500 then climbing right turn to 3000 direct ZUNNI WP and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.325	120.9 377.1	121.725	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-13	1760-1 449 (500-1)		1760-1¼ 449 (500-1¼)	1760-1½ 449 (500-1½)
CIRCLING	1880-1 569 (600-1)	1900-1 589 (600-1)	1900-1½ 589 (600-1½)	2120-2½ 809 (900-2½)

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

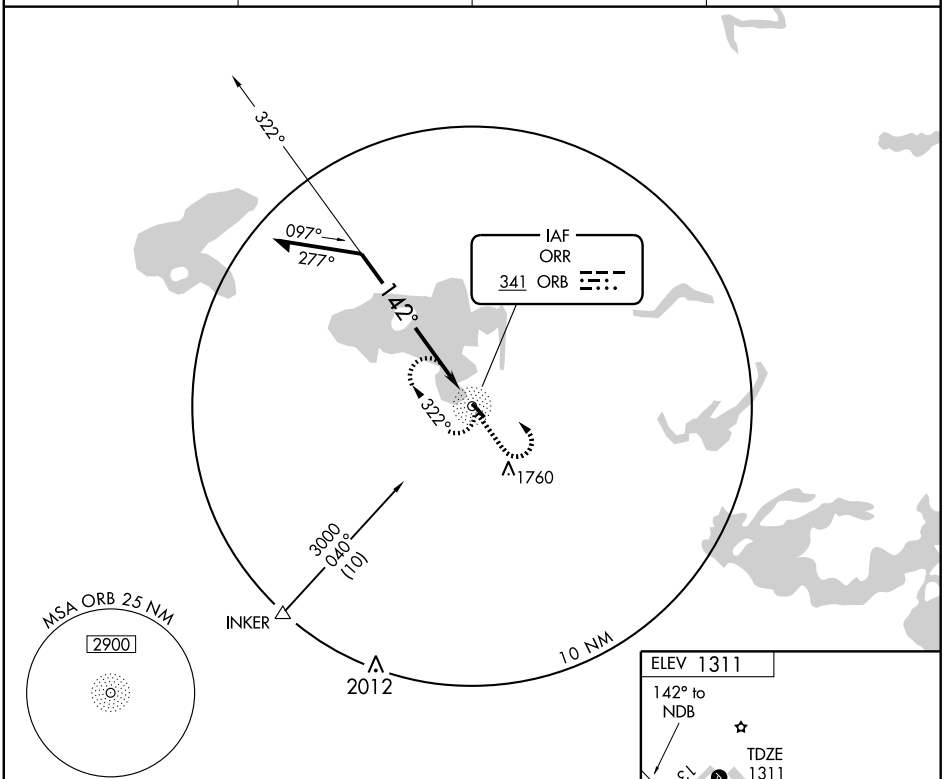
NDB ORB 341	APP CRS 142°	Rwy Idg 4001 TDZE 1311 Apt Elev 1311

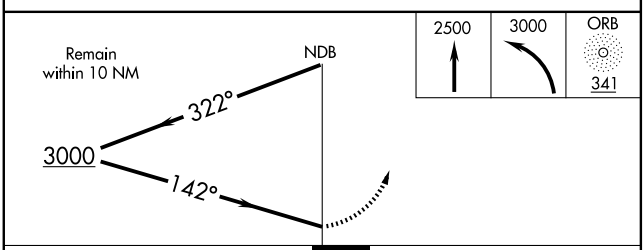
NDB RWY 13
ORR RGNL (ORB)

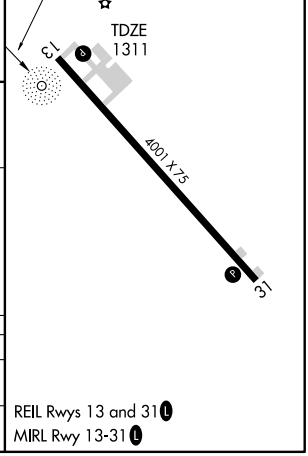
NA

MISSED APPROACH: Climb to 2500 then climbing left turn to 3000 direct ORB NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.325	120.9 377.1	121.725	122.8 (CTAF) L







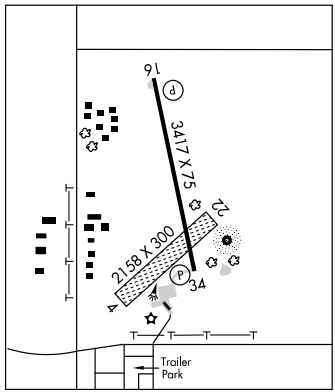
CATEGORY	A	B	C	D
S-13	2000-1	689 (700-1)	2000-2 689 (700-2)	2000-2¼ 689 (700-2¼)
CIRCLING	2000-1	689 (700-1)	2000-2 689 (700-2)	2120-2½ 809 (900-2½)

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

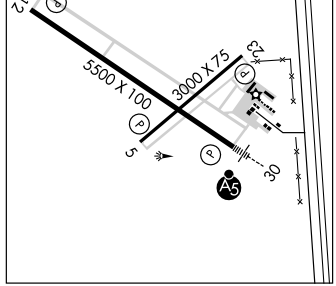
ORTONVILLE MUNI–MARTINSON FLD (VVV) 1 SE UTC−6(−5DT)
N45°18.34′ W96°25.47′
1101 B **FUEL** 100LL NOTAM FILE VVV
RWY 16–34: H3417X75 (ASPH) S–30 MIRL
RWY 16: PAPI(P4L)—GA 3.0° TCH 24′. Road.
RWY 34: PAPI(P4L)—GA 3.0° TCH 41′. Tree.
RWY 04–22: 2158X300 (TURF)
RWY 04: Pole. **RWY 22:** Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Self serve fuel avb 24 hrs with credit card. Rwy 04–22 not plowed winter months. Rwy 04–22 marked with yellow cones. MIRL Rwy 16–34 preset low intensity, increase intensity—CTAF. PAPI Rwy 16 and Rwy 34 operates 24 hrs.
WEATHER DATA SOURCES: AWOS–3 332 VVV (320) 839–2363.
COMMUNICATIONS: CTAF/UNICOM 122.8
MINNEAPOLIS CENTER APP/DEP CON 128.5
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE MOX.
MORRIS (T) VORW/DME 109.6 MOX Chan 33 N45°33.95′ W95°58.15′ 226° 24.8 NM to fld. 1132/5E. VOR/DME unmonitored.
NDB (MHW) 332 VVV N45°18.10′ W96°25.25′ at fld.
AWOS–3. NOTAM FILE VVV. Unmonitored.

TWIN CITIES
L–12I, 14H
IAP



OWATONNA DEGNER RGNL (OWA) 3 NW UTC−6(−5DT) N44°07.38′ W93°15.53′
1145 B S4 **FUEL** 100LL, JET A TPA—1997(852) NOTAM FILE OWA
RWY 12–30: H5500X100 (CONC) S–30, D–60 HIRL 0.7% up SE
RWY 12: REIL. PAPI(P4L).
RWY 30: MALSR. REIL. PAPI(P4L). Sign.
RWY 05–23: H3000X75 (ASPH) MIRL
RWY 05: REIL. PAPI(P4L)—GA 3.0° TCH 24′.
RWY 23: REIL. PAPI(P4L)—GA 3.0° TCH 23′.
AIRPORT REMARKS: Attended May–Sep 1400–0200Z‡, Oct–Apr 1400–0000Z‡. For svc after hrs call 507–444–2448. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. ACTIVATE HIRL Rwy 12–30, MIRL Rwy 05–23, REIL Rwy 05, Rwy 12, Rwy 23 and MALSR Rwy 30—CTAF.
WEATHER DATA SOURCES: AWOS–3 128.325 (507) 455–0642.
COMMUNICATIONS: CTAF/UNICOM 122.7
RCO 122.25 (PRINCETON RADIO)
Ⓡ **ROCHESTER APP/DEP CON** 119.8 (1100–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.35 (0500–1100Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
HALFWAY (T) VORW/DME 111.2 FOW Chan 49 N44°12.27′ W93°22.23′ 133° 6.9 NM to fld. 1098/2E. VOR/DME unmonitored.
TONNA NDB (LOM) 379 OW N44°04.43′ W93°09.32′ 301° 5.4 NM to fld.
ILS 109.55 I–OWA Rwy 30. LOM TONNA NDB.

OMAHA
H–2J, L–12J
IAP



APP CRS	Rwy Idg	3417
344°	TDZE	1097
	Apt Elev	1100

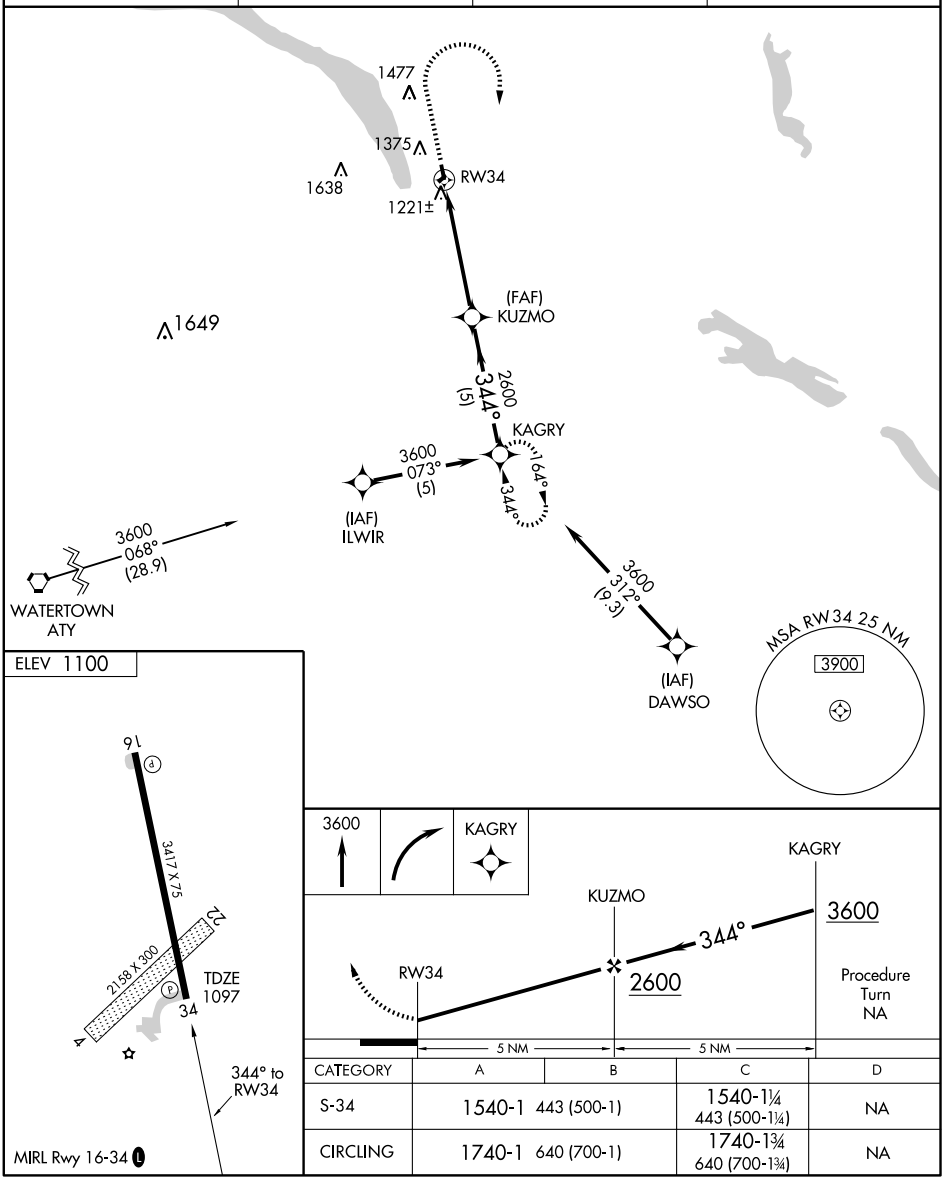
GPS RWY 34

ORTONVILLE MUNI-MARTINSON FIELD (VVV)

NA

MISSED APPROACH: Climb to 3600 then right turn direct KAGRY WP and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
332.0	128.5 306.2	121.725	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-34	1540-1 443 (500-1)		1540-1¼ 443 (500-1¼)	NA
CIRCLING	1740-1 640 (700-1)		1740-1¾ 640 (700-1¾)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010

NDB VVV 332	APP CRS 355°	Rwy Idg 3417 TDZE 1097 Apt Elev 1100

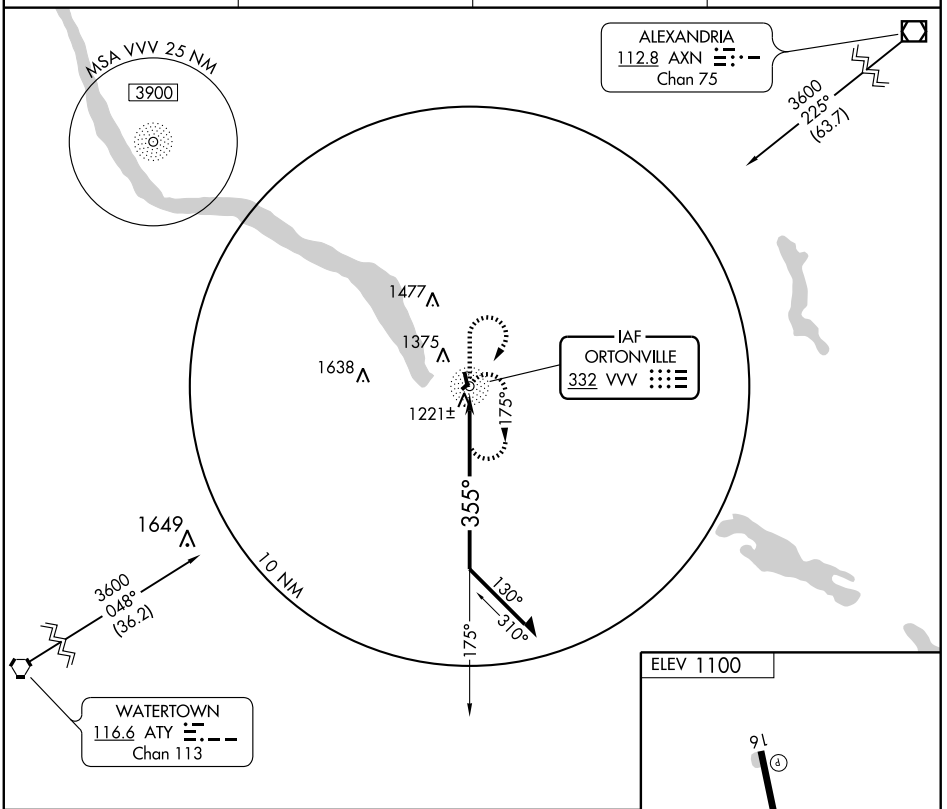
NDB RWY 34

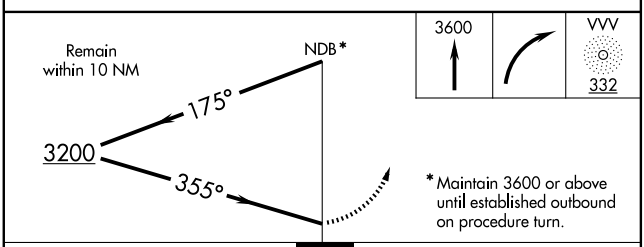
ORTONVILLE MUNI-MARTINSON FIELD (VVV)

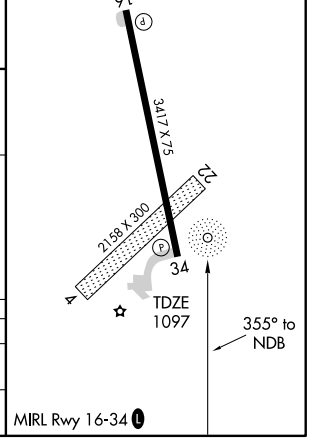
NA

MISSED APPROACH: Climb to 3600 then right turn direct VVV NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
332.0	128.5 306.2	121.725	122.8 (CTAF)





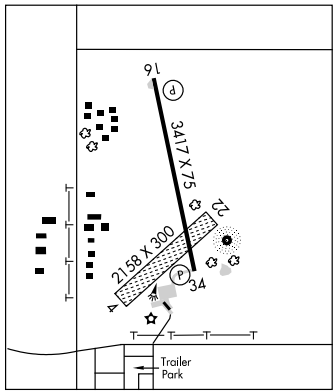


CATEGORY	A	B	C	D
S-34	1660-1	563 (600-1)	1660-1½ 563 (600-1½)	NA
CIRCLING	1740-1	640 (700-1)	1740-1¾ 640 (700-1¾)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010

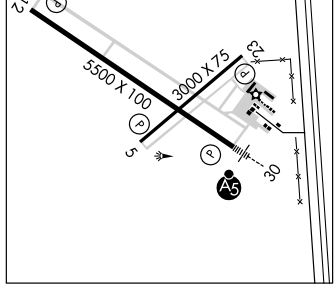
ORTONVILLE MUNI–MARTINSON FLD (VVV) 1 SE UTC−6(−5DT)
N45°18.34′ W96°25.47′
1101 B **FUEL** 100LL NOTAM FILE VVV
RWY 16–34: H3417X75 (ASPH) S–30 MIRL
RWY 16: PAPI(P4L)—GA 3.0° TCH 24′. Road.
RWY 34: PAPI(P4L)—GA 3.0° TCH 41′. Tree.
RWY 04–22: 2158X300 (TURF)
RWY 04: Pole. **RWY 22:** Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Self serve fuel avb 24 hrs with credit card. Rwy 04–22 not plowed winter months. Rwy 04–22 marked with yellow cones. MIRL Rwy 16–34 preset low intensity, increase intensity—CTAF. PAPI Rwy 16 and Rwy 34 operates 24 hrs.
WEATHER DATA SOURCES: AWOS–3 332 VVV (320) 839–2363.
COMMUNICATIONS: CTAF/UNICOM 122.8
MINNEAPOLIS CENTER APP/DEP CON 128.5
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE MOX.
MORRIS (T) VORW/DME 109.6 MOX Chan 33 N45°33.95′ W95°58.15′ 226° 24.8 NM to fld. 1132/5E. VOR/DME unmonitored.
NDB (MHW) 332 VVV N45°18.10′ W96°25.25′ at fld.
AWOS–3. NOTAM FILE VVV. Unmonitored.

TWIN CITIES
L–12I, 14H
IAP



OWATONNA DEGNER RGNL (OWA) 3 NW UTC−6(−5DT) N44°07.38′ W93°15.53′
1145 B S4 **FUEL** 100LL, JET A TPA—1997(852) NOTAM FILE OWA
RWY 12–30: H5500X100 (CONC) S–30, D–60 HIRL 0.7% up SE
RWY 12: REIL. PAPI(P4L).
RWY 30: MALSR. REIL. PAPI(P4L). Sign.
RWY 05–23: H3000X75 (ASPH) MIRL
RWY 05: REIL. PAPI(P4L)—GA 3.0° TCH 24′.
RWY 23: REIL. PAPI(P4L)—GA 3.0° TCH 23′.
AIRPORT REMARKS: Attended May–Sep 1400–0200Z‡, Oct–Apr 1400–0000Z‡. For svc after hrs call 507–444–2448. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. ACTIVATE HIRL Rwy 12–30, MIRL Rwy 05–23, REIL Rwy 05, Rwy 12, Rwy 23 and MALSR Rwy 30—CTAF.
WEATHER DATA SOURCES: AWOS–3 128.325 (507) 455–0642.
COMMUNICATIONS: CTAF/UNICOM 122.7
RCO 122.25 (PRINCETON RADIO)
Ⓡ **ROCHESTER APP/DEP CON** 119.8 (1100–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.35 (0500–1100Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
HALFWAY (T) VORW/DME 111.2 FOW Chan 49 N44°12.27′ W93°22.23′ 133° 6.9 NM to fld. 1098/2E. VOR/DME unmonitored.
TONNA NDB (LOM) 379 OW N44°04.43′ W93°09.32′ 301° 5.4 NM to fld.
ILS 109.55 I–OWA Rwy 30. LOM TONNA NDB.

OMAHA
H–2J, L–12J
IAP



LOC I-OWA	APP CRS	Rwy Idg	5500
109.55	302°	TDZE	1145
		Apt Elev	1145

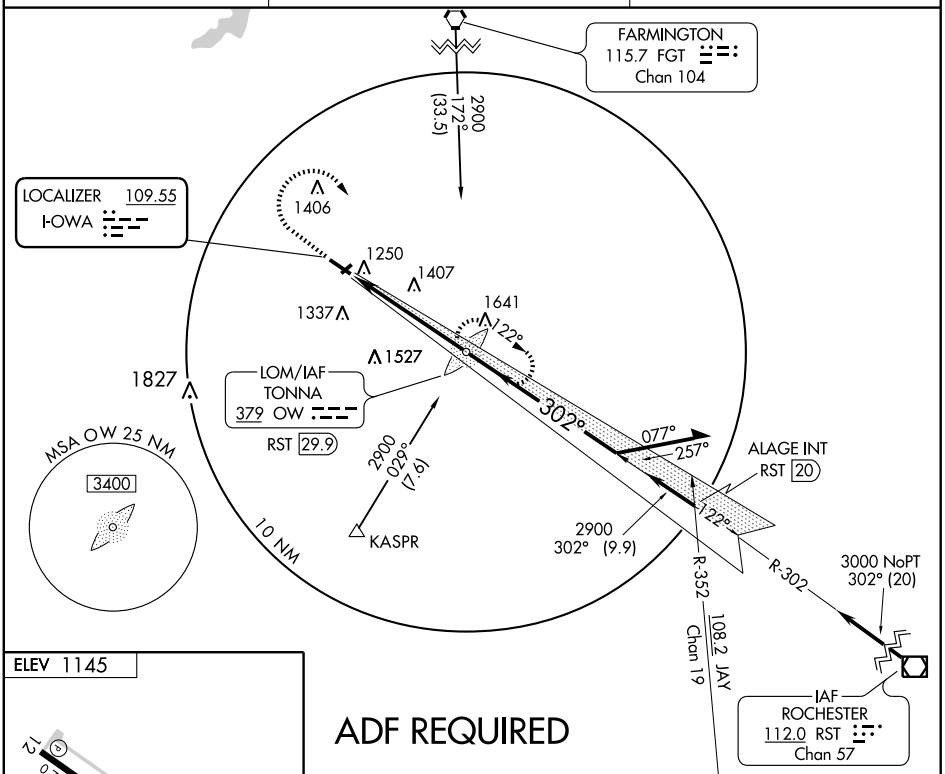
ILS RWY 30
OWATONNA DEGNER RGNL (OWA)

T
A NA

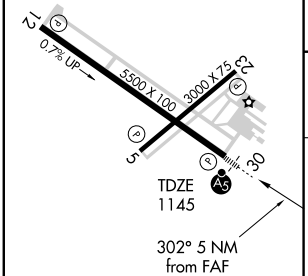
MALSR

MISSED APPROACH Climb to 2000 then climbing right turn to 2900 direct TONNA LOM and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
128.325	119.8 251.125	122.7 (CTAF) L

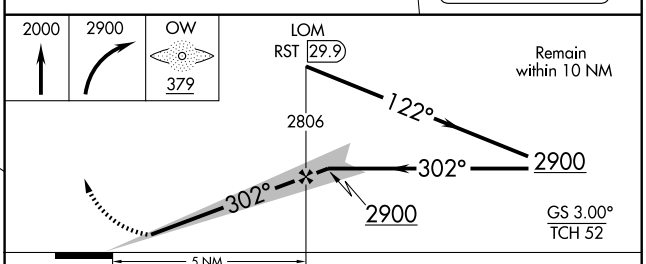


ADF REQUIRED



MIRL Rwy 5-23 L
REIL Rwys 5, 12 and 23 L
REIL Rwy 30
HIRL Rwy 12-30 L

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D
S-ILS 30	1345-½ 200 (200-½)			
S-LOC 30	1680-½ 535 (600-½)		1680-1 535 (600-1)	1680-1¼ 535 (600-1¼)
CIRCLING	1680-1 535 (600-1)		1720-1½ 575 (600-1½)	1720-2 575 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 12

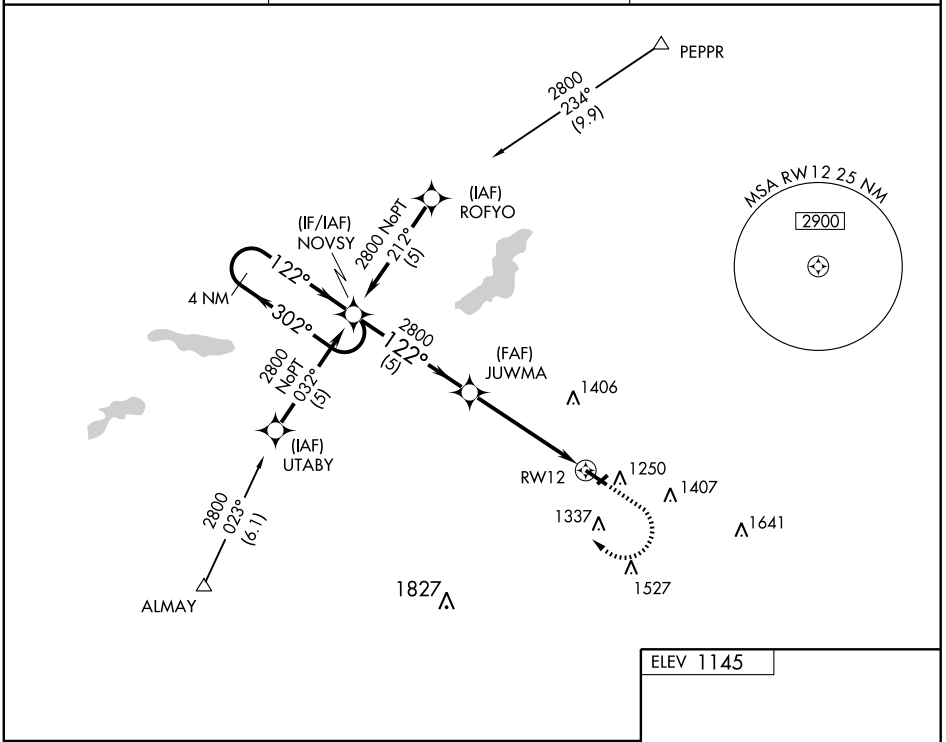
OWATONNA DEGNER RGNL (OWA)

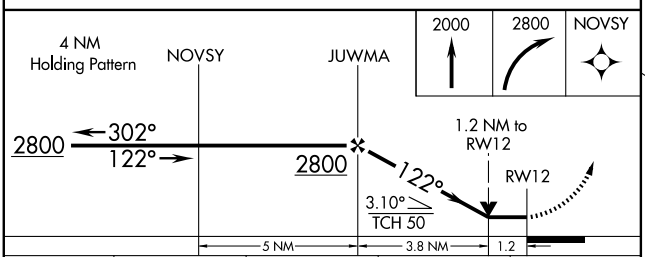
APP CRS	Rwy Idg	5500
122°	TDZE	1110
	Apt Elev	1145

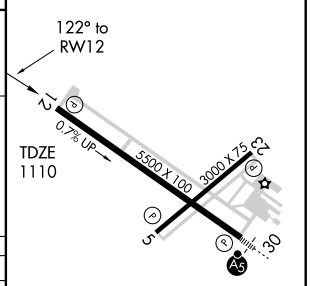
T NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 2000 then climbing right turn to 2800 direct NOVSY WP and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
128.325	119.8 251.125	122.7 (CTAF) L







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	NA			
LNAV MDA	1540-1 430 (400-1)		1540-1¼ 430 (400-1¼)	1540-1½ 430 (400-1½)
CIRCLING	1620-1 475 (500-1)	1700-1 555 (600-1)	1700-1½ 555 (600-1½)	1720-2 575 (600-2)

MIRL Rwy 5-23 L
REIL Rwys 5, 12 and 23 L
REIL Rwy 30
HIRL Rwy 12-30 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME FOW	APP CRS	Rwy Idg	5500
111.2	313°	TDZE	1145
Chan 49		Apt Elev	1145

VOR/DME RWY 30

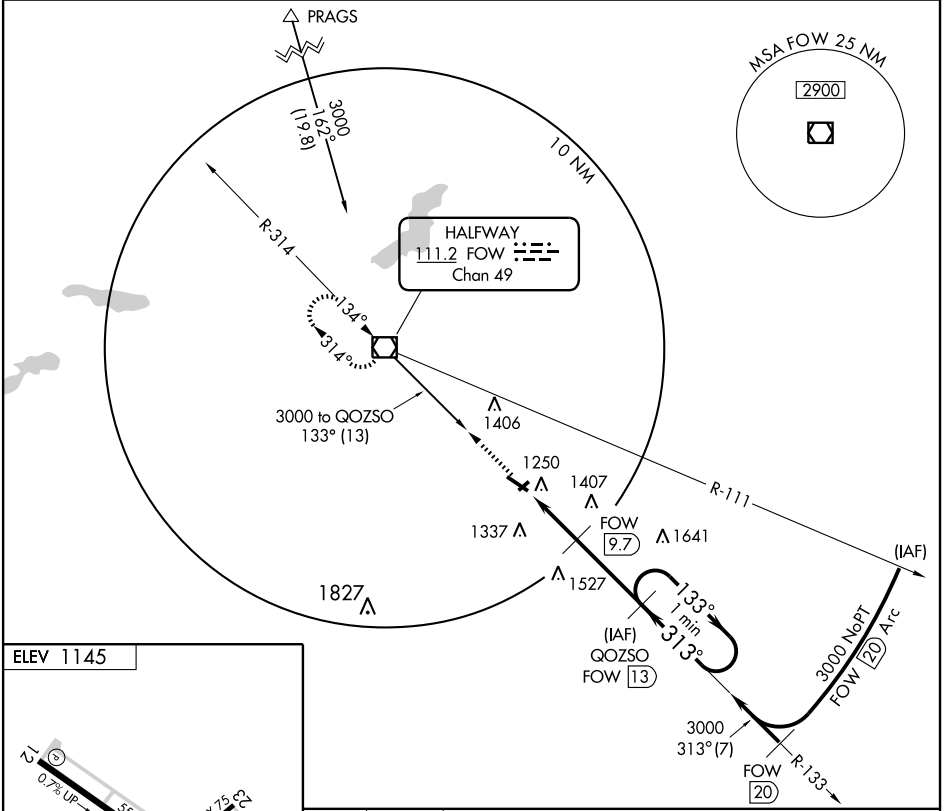
OWATONNA DEGNER RGNL (OWA)

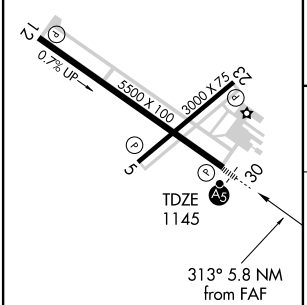
T
NA

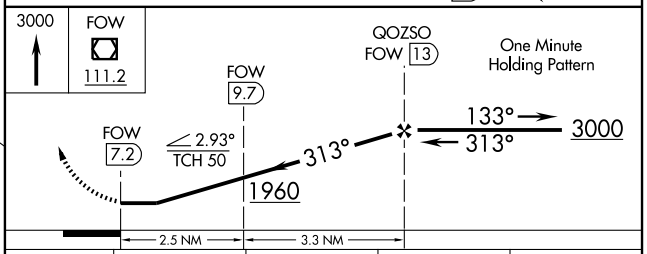
MALSR

MISSED APPROACH: Climb to 3000 direct FOW VOR/DME and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
128.325	119.8 251.125	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-30	1700-1 555 (600-1)		1700-1½ 555 (600-1½)	1700-1¾ 555 (600-1¾)
CIRCLING	1700-1 555 (600-1)		1700-1½ 555 (600-1½)	1720-2 575 (600-2)

MIRL Rwy 5-23 L
REIL Rwys 5, 12 and 23 L
REIL Rwy 30
HIRL Rwy 12-30 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME FOW	APP CRS	Rwy Idg	5500
111.2	134°	TDZE	1110
Chan 49		Apt Elev	1145

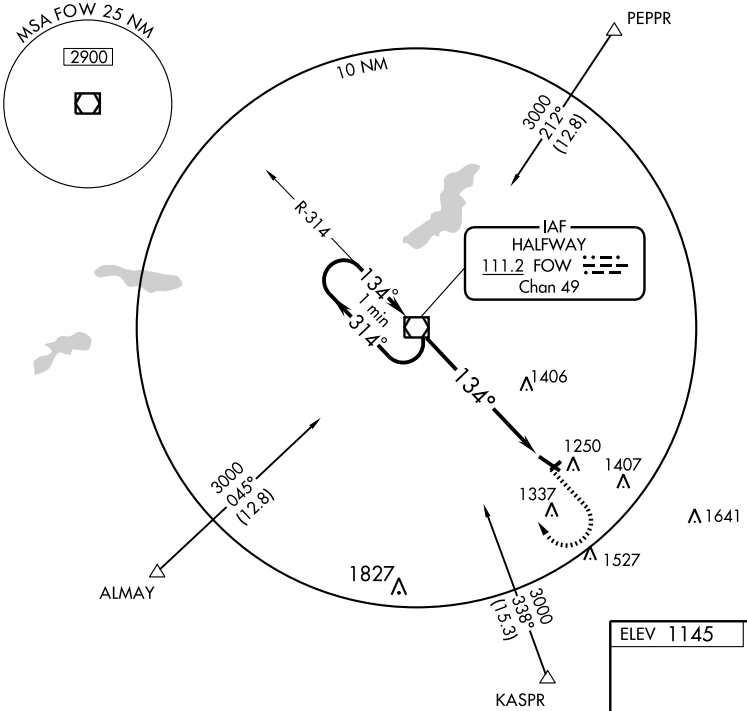
VOR RWY 12

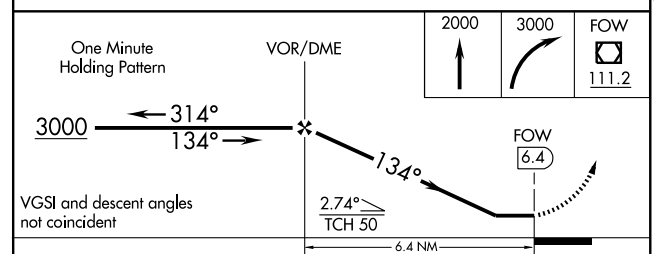
OWATONNA DEGNER RGNL (OWA)

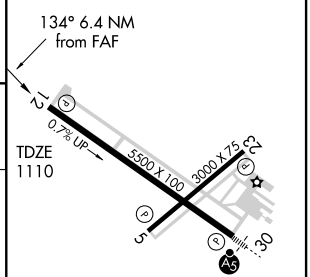
NA

MISSED APPROACH Climb to 2000 then climbing right turn to 3000 direct FOW VOR/DME and hold.

AWOS-3	ROCHESTER APP CON ★	UNICOM
128.325	119.8 251.125	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-12	1560-1	450 (500-1)	1560-1¼ 450 (500-1¼)	1560-1½ 450 (500-1½)
CIRCLING	1620-1 475 (500-1)	1700-1 555 (600-1)	1700-1½ 555 (600-1½)	1720-2 575 (600-2)

FAF to MAP 6.4 NM					
Knots	60	90	120	150	180
Min:Sec	6:24	4:16	3:12	2:34	2:08

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

PARK RAPIDS MUNI–KONSHOK FLD (PKD) 2 S UTC–6(–5DT) N46°54.04′ W95°04.39′

TWIN CITIES
H–2J, L–14H
IAP

1445 B S4 **FUEL** 100LL, JET A TPA—2402(957) NOTAM FILE PKD

RWY 13–31: H5498X100 (ASPH) S–20, D–36 HIRL

RWY 13: REIL. PAPI(P4L)

RWY 31: MALSR. PAPI(P4L)

RWY 17–35: 3244X140 (TURF)

AIRPORT REMARKS: Attended Mon–Sat 1400–2300Z‡. 100LL avbl 24 hrs with credit card. Call 218–237–8528 for svc after hrs. Rwy 17–35 CLOSED winter months. No hold/ILS hold markers on turf twy between Rwy 21 and Rwy 35. Rwy 17–35 marked by yellow cones. ACTIVATE HIRL Rwy 13–31, REIL Rwy 13, MALSR Rwy 31, PAPI Rwy 13 and Rwy 31—CTAF.

WEATHER DATA SOURCES: ASOS 110.6 PKD (218) 732–0920

COMMUNICATIONS: CTAF/UNICOM 123.0

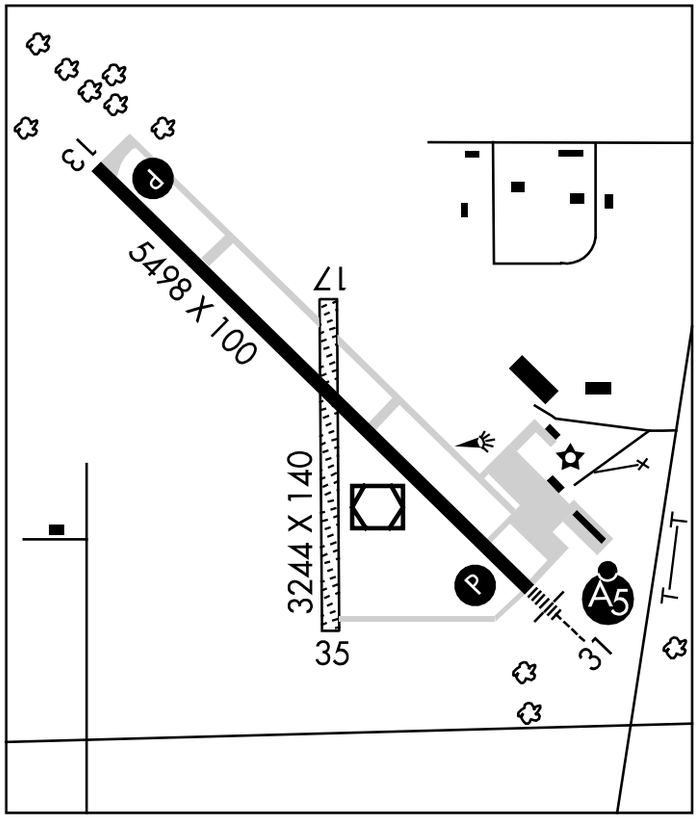
RCO 122.1R 110.6T (PRINCETON RADIO)

RADIO AIDS TO NAVIGATION: NOTAM FILE PKD.

(L) VOR/DME 110.6 PKD Chan 43 N46°53.89′ W95°04.25′ at fld. 1441/4E. **ASOS**

SPIDA NDB (LOM) 269 PK N46°50.04′ W94°58.53′ 311° 5.7 NM to fld.

ILS 110.9 I–PKD Rwy 31. Class IC LOM SPIDA NDB.



PAYNESVILLE MUNI (PEX) 1 SW UTC–6(–5DT) N45°22.32′ W94°44.69′

TWIN CITIES
L–14H

1180 **FUEL** 100LL NOTAM FILE PEX

RWY 11–29: H3300X75 (ASPH) MIRL

AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card. MIRL Rwy 11–29 preset on low ints, to increase intensity and ACTIVATE dalgt hrs—CTAF.

WEATHER DATA SOURCES: AWOS–3 120.35 (320) 243–4538.

COMMUNICATIONS: CTAF 122.9

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

DARWIN (L) VORTAC 109.0 DWN Chan 27 N45°05.25′ W94°27.23′ 317° 21 NM to fld. 1130/7E.

PELICAN RAPIDS MUNI–LYON'S FLD (47Y) 4 N UTC–6(–5DT) N46°38.50′ W96°06.27′

TWIN CITIES

1389 B **FUEL** 100LL, MOGAS NOTAM FILE PNM

RWY 15–33: 3260X150 (TURF) LIRL

RWY 15: Hill **RWY 33:** Hill.

AIRPORT REMARKS: Unattended. For fuel call 218–731–4050. Deer on and invof arpt. Rwy 15–33 marked with yellow cones.

COMMUNICATIONS: CTAF 122.9

LOC I-PKD	APP CRS	Rwy Idg	5498
110.9	311°	TDZE	1443
		Apt Elev	1443

ILS or LOC RWY 31

PARK RAPIDS MUNI-KONSHOK FIELD (PKD)

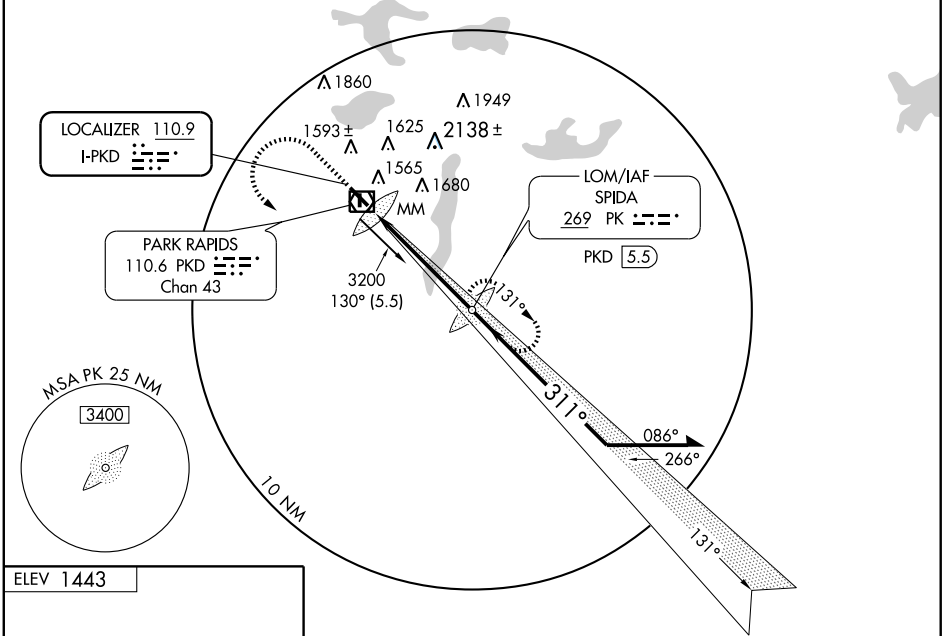
NA ADF required.

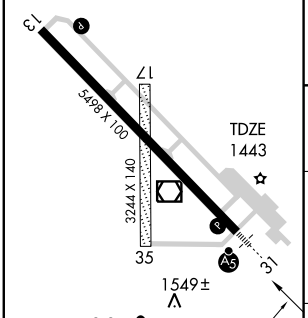
MALSR

MISSED APPROACH: Climb to 3200 then left turn direct Spida LOM and hold.

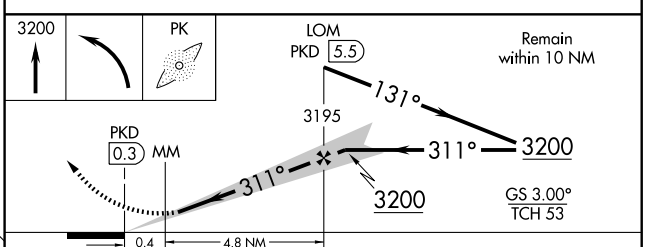
ASOS	PRINCETON RADIO	UNICOM
110.6	122.1R	123.0 (CTAF) L

ADF or DME REQUIRED





FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44



CATEGORY	A	B	C	D
S-ILS 31	1643-½ 200 (200-½)			
S-LOC 31	1800-½ 357 (400-½)			1800-¾ 357 (400-¾)
CIRCLING	1920-1 477 (500-1)		1920-1½ 477 (500-1½)	2000-2 557 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOM PK	APP CRS	Rwy Idg	5498
269	311°	TDZE	1443
		Apt Elev	1443

NDB or GPS RWY 31

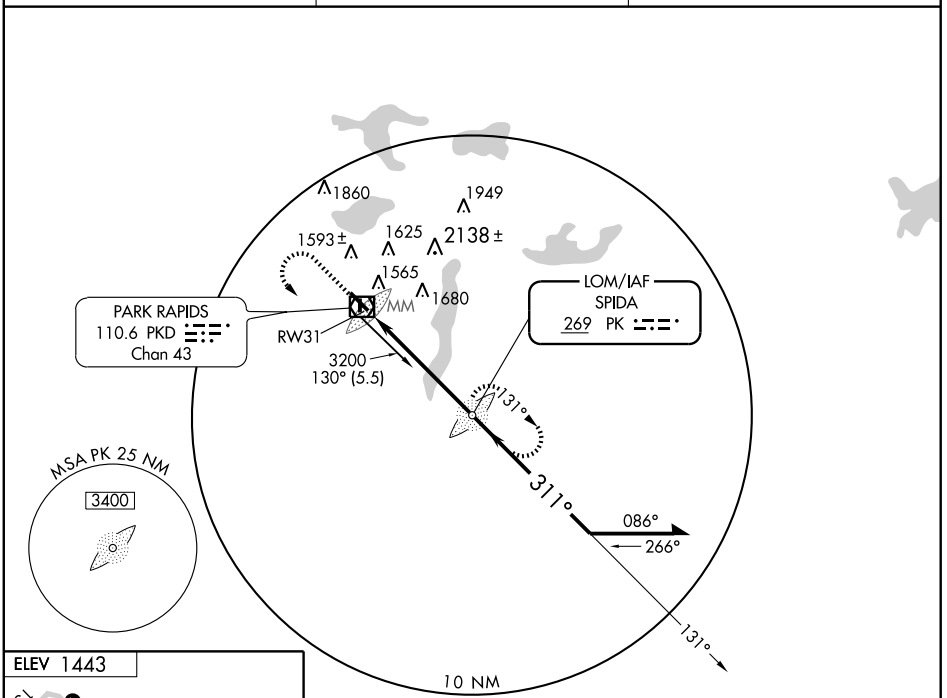
PARK RAPIDS MUNI-KONSHOK FIELD (PKD)

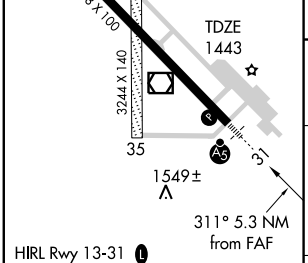
NA

MALSR

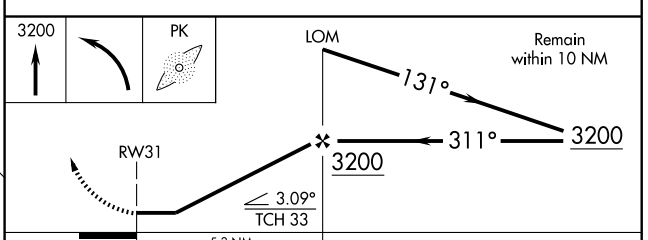
MISSED APPROACH: Climb to 3200, then left turn direct PK LOM and hold.

ASOS	PRINCETON RADIO	UNICOM
110.6	122.1R	123.0 (CTAF) L





HIRL Rwy 13-31 L
MIRL Rwy 13-31 L
REIL Rwy 13 L



FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

CATEGORY	A	B	C	D
S-31	1860-¾ 417 (500-¾)			1860-1 417 (500-1)
CIRCLING	1920-1 477 (500-1)		1920-1½ 477 (500-1½)	2000-2 557 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

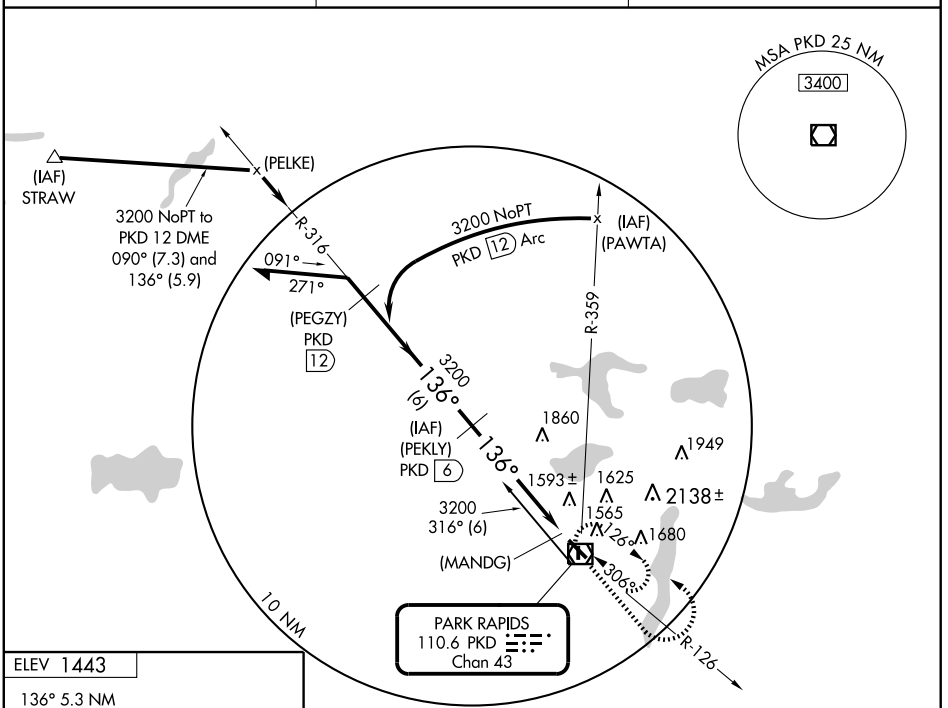
VOR/DME PKD	APP CRS	Rwy Idg	5498
110.6	136°	TDZE	1443
Chan 43		Apt Elev	1443

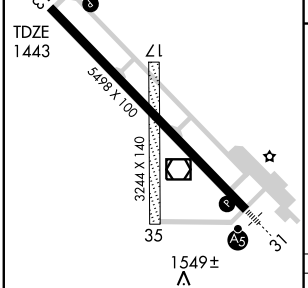
VOR/DME or GPS RWY 13

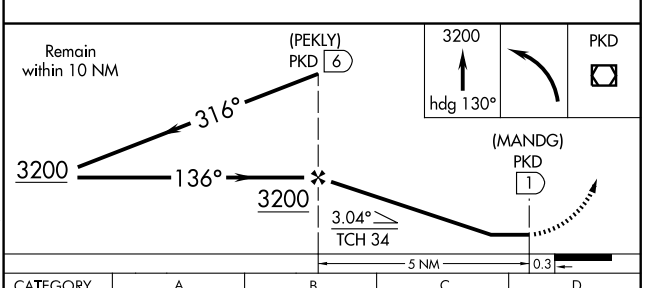
PARK RAPIDS MUNI-KONSHOK FIELD (PKD)

MISSED APPROACH: Climb to 3200 via heading 130° then left turn direct PKD VOR/DME and hold.

ASOS	PRINCETON RADIO	UNICOM
110.6	122.1R	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-13	1860-1 417 (500-1)		1860-1¼ 417 (500-1¼)	
CIRCLING	1920-1 477 (500-1)		1920-1½ 477 (500-1½)	2000-2 557 (600-2)

HIRL Rwy 13-31 L
MIRL Rwy 13-31 L
REIL Rwy 13 L

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME PKD 110.6 Chan 43	APP CRS 306°	Rwy Idg 5498 TDZE 1443 Apt Elev 1443

VOR RWY 31

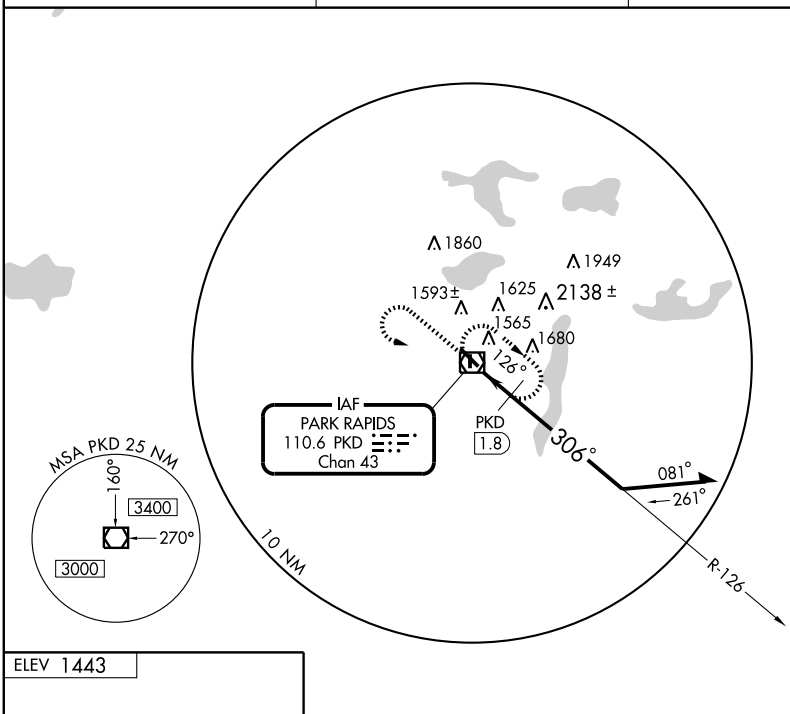
PARK RAPIDS MUNI-KONSHOK FIELD (PKD)

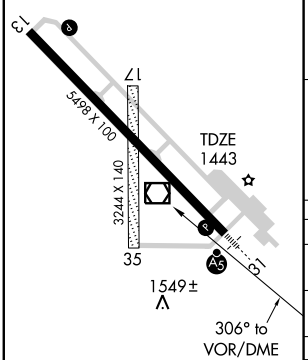
For inoperative MALSR, increase Cat. D S-31. DME minimums visibility ¼ mile.

MALSR

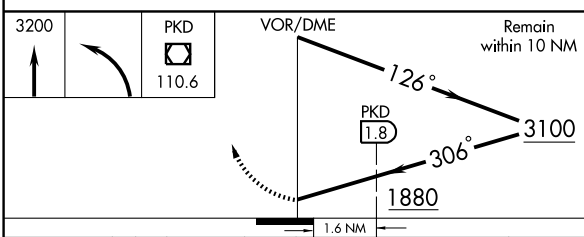
MISSED APPROACH: Climb to 3200, then left turn direct PKD VOR/DME and hold.

ASOS 110.6	PRINCETON RADIO 122.1R	UNICOM 123.0 (CTAF) L





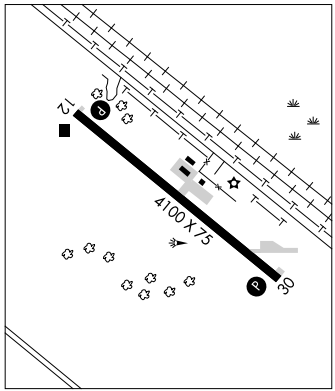
HIRL Rwy 13-31 L
MIRL Rwy 13-31 L
REIL Rwy 13 L



CATEGORY	A	B	C	D
S-31	1880-½ 437 (500-½)		1880-¾ 437 (500-¾)	1800-1 437 (500-1)
CIRCLING	1920-1 477 (500-1)		1920-1½ 477 (500-1½)	2000-2 557 (600-2)
DME MINIMUMS				
S-31	1820-½ 377 (400-½)			1820-1 377 (400-1)
CIRCLING	1920-1 477 (500-1)		1920-1½ 477 (500-1½)	2000-2 557 (600-2)

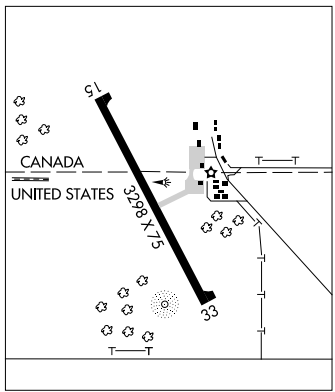
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

PERHAM MUNI (16D) 2 NW UTC−6(−5DT) N46°36.25′ W95°36.27′ **TWIN CITIES**
1371 B **FUEL** 100LL NOTAM FILE PNM **L–14H**
RWY 12–30: H4100X75 (ASPH) MIRL **IAP**
RWY 12: REIL. PAPI(P4L). **RWY 30:** REIL. PAPI(P4L). Trees.
AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Helicopter ops, NW corner of arpt. Rwy 12–30 rough ride, grass growing through cracks in rwy. ACTIVATE MIRL Rwy 12–30, PAPI and REIL Rwy 12 and Rwy 30—CTAF.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 126.1
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE DTL.
DETROIT LAKES (T) VORW/DME 111.2 DTL Chan 49 N46°49.54′ W95°53.23′ 134° 17.7 NM to fld. 1387/5E. Unmonitored.



PINECREEK

PINEY PINECREEK BORDER (48Y) 2 NW UTC−6(−5DT) N48°59.84′ W95°58.84′ **TWIN CITIES**
1078 B **FUEL** 100LL OX 1,2 LRA NOTAM FILE PNM **L–14H**
RWY 15–33: H3298X75 (ASPH) MIRL 0.4% up NW **IAP**
AIRPORT REMARKS: Unattended. Self service fuel avbl 24 hrs. North parking ramp is in Canada, South parking ramp is in U.S. Customs office adjacent to arpt; customs phone is 218–463–1952. US customs hrs 1500–2300Z‡, 365 days a year. No svcs avbl after 2300Z‡. Canadian customs avbl 1500–0400Z‡. ACTIVATE MIRL Rwy 15–33—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8
MINNEAPOLIS CENTER APP/DEP CON 134.75
RADIO AIDS TO NAVIGATION: NOTAM FILE ROX.
ROSEAU (L) VORW/DME 108.8 ROX Chan 25 N48°51.28′ W95°41.70′ 302° 14.2 NM to fld. 1059/5E.
NDB (MHW) 342 PFT N48°59.54′ W95°58.75′ at fld. NOTAM FILE PNM.



RNAV (GPS) RWY 30

PERHAM MUNI (16D)

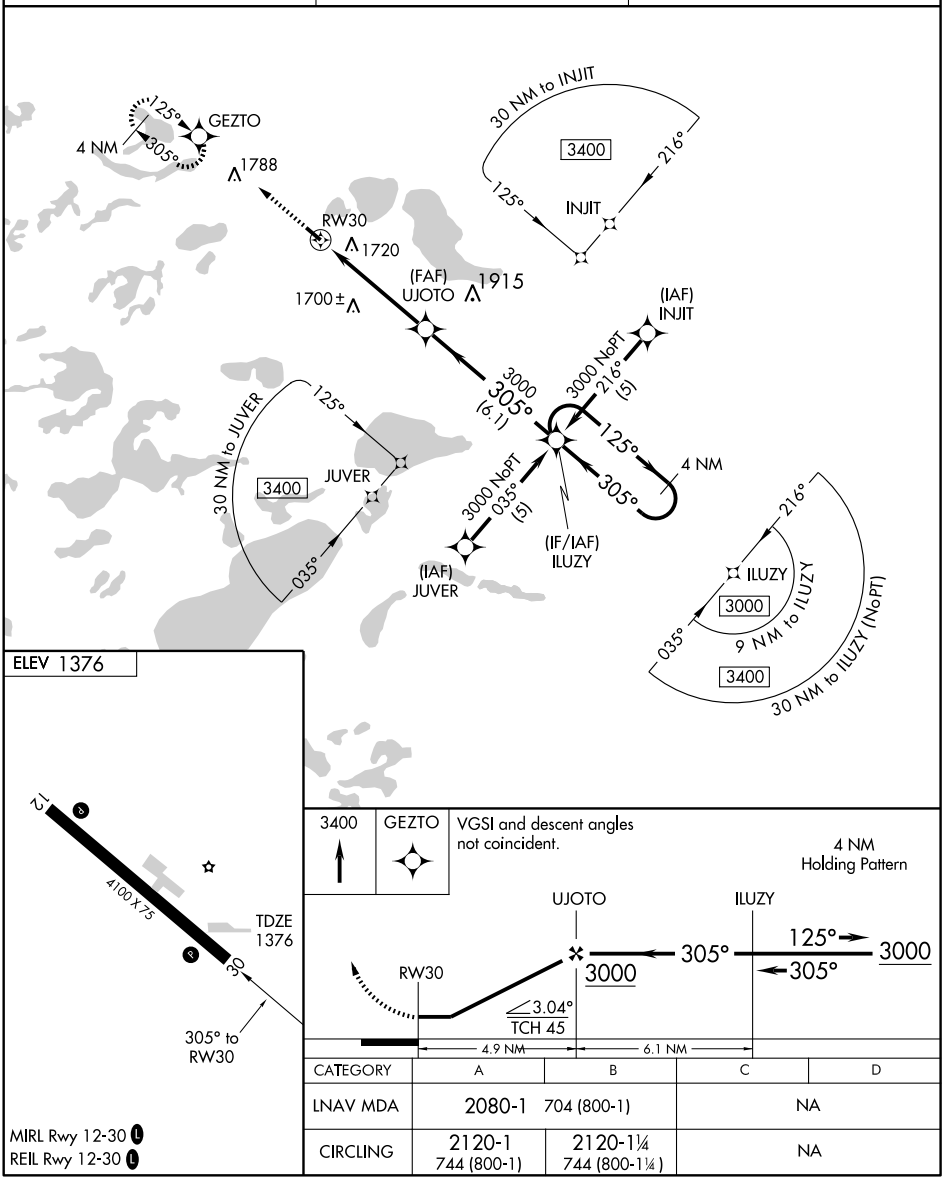
APP CRS	Rwy Idg	4100
305°	TDZE	1376
	Apt Elev	1376

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Detroit Lakes altimeter setting; when not received, use Wadena altimeter setting.

NA

MISSED APPROACH: Climb to 3400 direct GEZTO and hold.

MINNEAPOLIS CENTER	GCO	CTAF
126.1 269.2	121.725	122.9 L

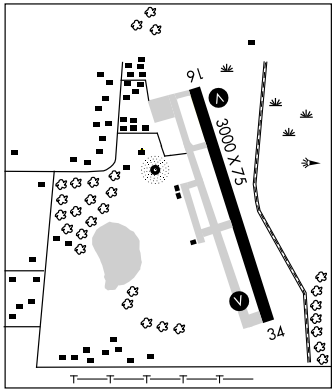


MIRL Rwy 12-30 L
REIL Rwy 12-30 L

CATEGORY	A	B	C	D
LNAV MDA	2080-1	704 (800-1)	NA	
CIRCLING	2120-1 744 (800-1)	2120-1¼ 744 (800-1¼)	NA	

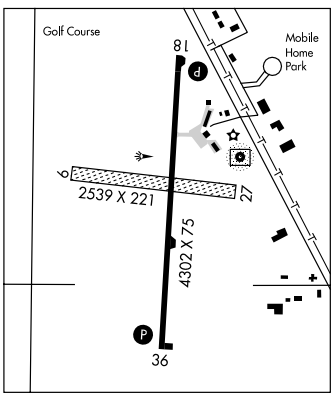
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

PINE RIVER RGNL (PWC) 1 E UTC−6(−5DT) N46°43.49′ W94°22.90′ **TWIN CITIES**
1295 S4 **FUEL** 100LL NOTAM FILE PWC **L–14H**
RWY 16–34: H3000X75 (ASPH) MIRL **IAP**
RWY 16: REIL. VASI(V2L)—GA 3.0° TCH 23′. Trees.
RWY 34: REIL. VASI(V2L)—GA 3.0° TCH 23′. Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡, Sat 1400–1800Z‡. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Deer and waterfowl on and invof arpt. Confirm snow removal and winter conditions with arpt manager call 218–587–2440. Rwy 34 calm wind rwy. MIRL preset on medium ints, increase ints and ACTIVATE VASI Rwy 16 and Rwy 34 and REIL Rwy 16 and Rwy 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.525 (218) 587–3420.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 118.05
RADIO AIDS TO NAVIGATION: NOTAM FILE BRD.
BRAINERD (H) VORTACW 116.9 BRD Chan 116 N46°20.89′ W94°01.55′ 324° 27.0 NM to fld. 1260/3E.
NDB (MHW) 330 PWC N46°43.62′ W94°23.07′23.07′ at fld. NOTAM FILE PWC.



PINEY PINECREEK BORDER (See PINECREEK)

PIPESTONE MUNI (PQN) 1 SE UTC−6(−5DT) N43°59.00′ W96°18.02′ **OMAHA**
1736 B **FUEL** 100LL, JET A, MOGAS NOTAM FILE PQN **L–12I**
RWY 18–36: H4302X75 (ASPH) S–16, D–22 MIRL **IAP**
RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 23′.
RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 28′.
RWY 09–27: 2539X221 (TURF) 0.5% up E
RWY 09: Trees. **RWY 27:** P-line.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Fuel avbl 24 hrs with credit card. Rwy 09–27 not plowed winter months. Rwy 09–27 marked with yellow cones. ACTIVATE MIRL Rwy 18–36; REIL Rwy 18 and Rwy 36 and PAPI Rwy 18 and Rwy 36—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.375 (507) 825–6895.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.05
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE FSD.
SIOUX FALLS (H) VORTACW 115.0 FSD Chan 97 N43°38.97′ W96°46.87′ 037° 28.9 NM to fld. 1570/9E. **HIWAS.**
NDB/DME (MHW) 284 PQN Chan 28 N43°59.17′ W96°17.79′ at fld. DME Chan 28 paired with VHF frequency 109.10. NOTAM FILE PQN.



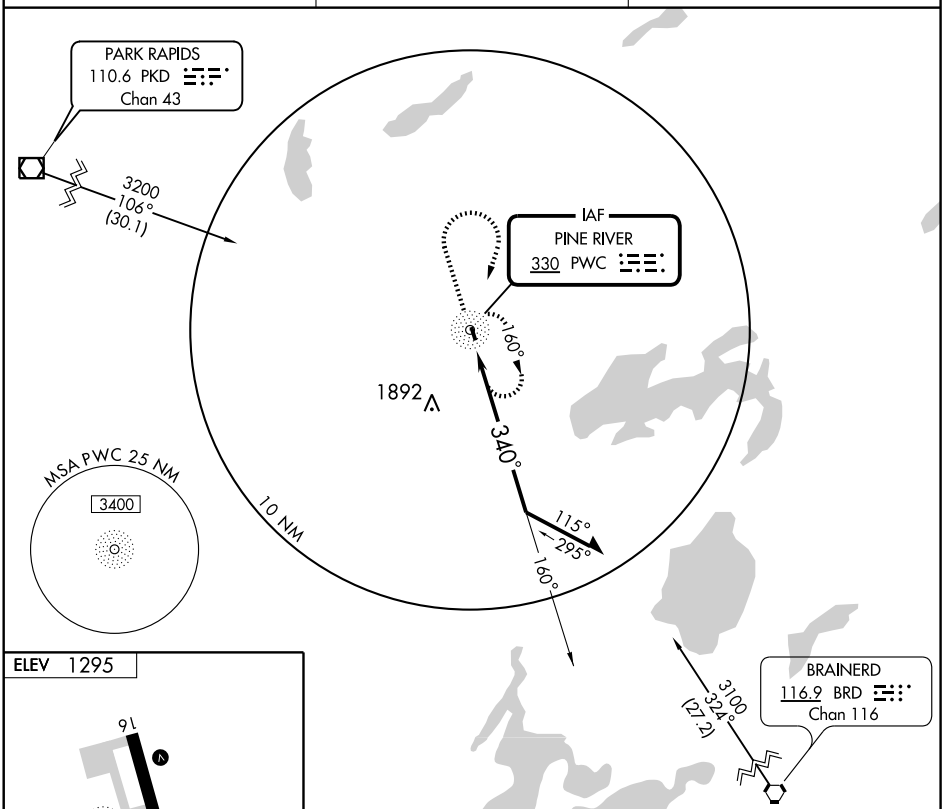
NDB PWC	APP CRS	Rwy Idg	3000
330	340°	TDZE	1295
		Apt Elev	1295

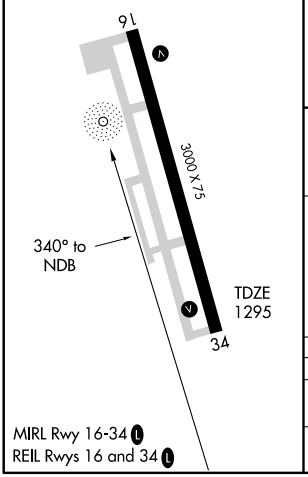
NDB RWY 34
PINE RIVER RGNL (PWC)

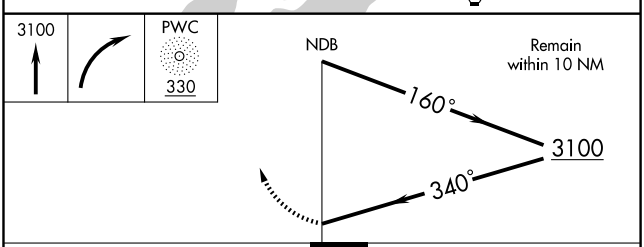
NA

MISSED APPROACH: Climb to 3100 then right turn direct PWC NDB and hold.

ASOS-3	MINNEAPOLIS CENTER	CTAF
118.525	118.05 239.0	122.9 L







CATEGORY	A	B	C	D
S-34	2060-1 765 (800-1)	2060-1¼ 765 (800-1¼)	2060-2¼ 765 (800-2¼)	NA
CIRCLING	2060-1 765 (800-1)	2060-1¼ 765 (800-1¼)	2060-2¼ 765 (800-2¼)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 34

PINE RIVER RGNL (PWC)

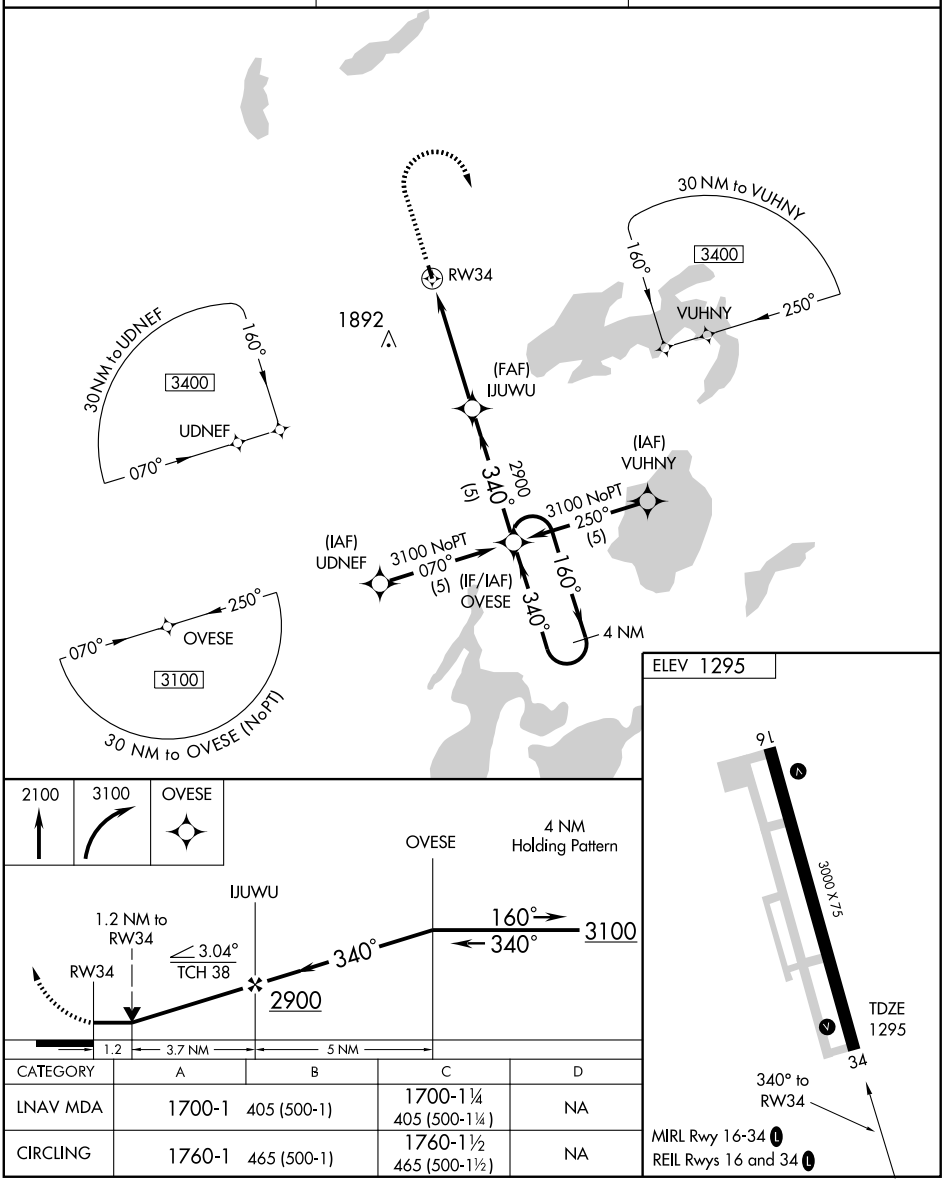
APP CRS		
340°	Rwy Idg	3000
	TDZE	1295
	Apt Elev	1295

NA

GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 2100 then climbing right turn to 3100 direct OVESE WP and hold.

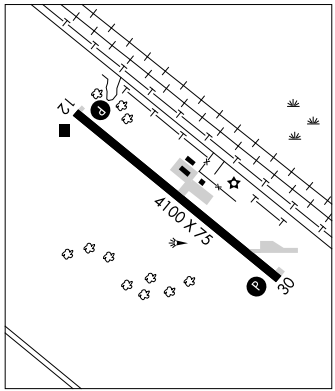
ASOS-3	MINNEAPOLIS CENTER	CTAF
118.525	118.05 239.0	122.9 L



CATEGORY	A	B	C	D
LNAV MDA	1700-1	405 (500-1)	1700-1¼ 405 (500-1¼)	NA
CIRCLING	1760-1	465 (500-1)	1760-1½ 465 (500-1½)	NA

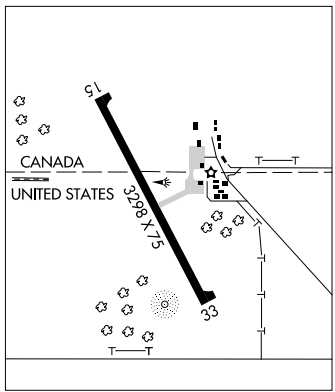
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

PERHAM MUNI (16D) 2 NW UTC−6(−5DT) N46°36.25′ W95°36.27′ **TWIN CITIES**
1371 B **FUEL** 100LL NOTAM FILE PNM **L–14H**
RWY 12–30: H4100X75 (ASPH) MIRL **IAP**
RWY 12: REIL. PAPI(P4L). **RWY 30:** REIL. PAPI(P4L). Trees.
AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Helicopter ops, NW corner of arpt. Rwy 12–30 rough ride, grass growing through cracks in rwy. ACTIVATE MIRL Rwy 12–30, PAPI and REIL Rwy 12 and Rwy 30—CTAF.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 126.1
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE DTL.
DETROIT LAKES (T) VORW/DME 111.2 DTL Chan 49 N46°49.54′ W95°53.23′ 134° 17.7 NM to fld. 1387/5E. Unmonitored.



PINECREEK

PINEY PINECREEK BORDER (48Y) 2 NW UTC−6(−5DT) N48°59.84′ W95°58.84′ **TWIN CITIES**
1078 B **FUEL** 100LL OX 1,2 LRA NOTAM FILE PNM **L–14H**
RWY 15–33: H3298X75 (ASPH) MIRL 0.4% up NW **IAP**
AIRPORT REMARKS: Unattended. Self service fuel avbl 24 hrs. North parking ramp is in Canada, South parking ramp is in U.S. Customs office adjacent to arpt; customs phone is 218–463–1952. US customs hrs 1500–2300Z‡, 365 days a year. No svcs avbl after 2300Z‡. Canadian customs avbl 1500–0400Z‡. ACTIVATE MIRL Rwy 15–33—CTAF.
COMMUNICATIONS: CTAF/UNICOM 122.8
MINNEAPOLIS CENTER APP/DEP CON 134.75
RADIO AIDS TO NAVIGATION: NOTAM FILE ROX.
ROSEAU (L) VORW/DME 108.8 ROX Chan 25 N48°51.28′ W95°41.70′ 302° 14.2 NM to fld. 1059/5E.
NDB (MHW) 342 PFT N48°59.54′ W95°58.75′ at fld. NOTAM FILE PNM.



NDB PFT	APP CRS		
342	315°	Rwy Idg	3298
		TDZE	1078
		Apt Elev	1078

NDB or GPS RWY 33

PINECREEK/ PINEY PINECREEK BORDER (48Y)

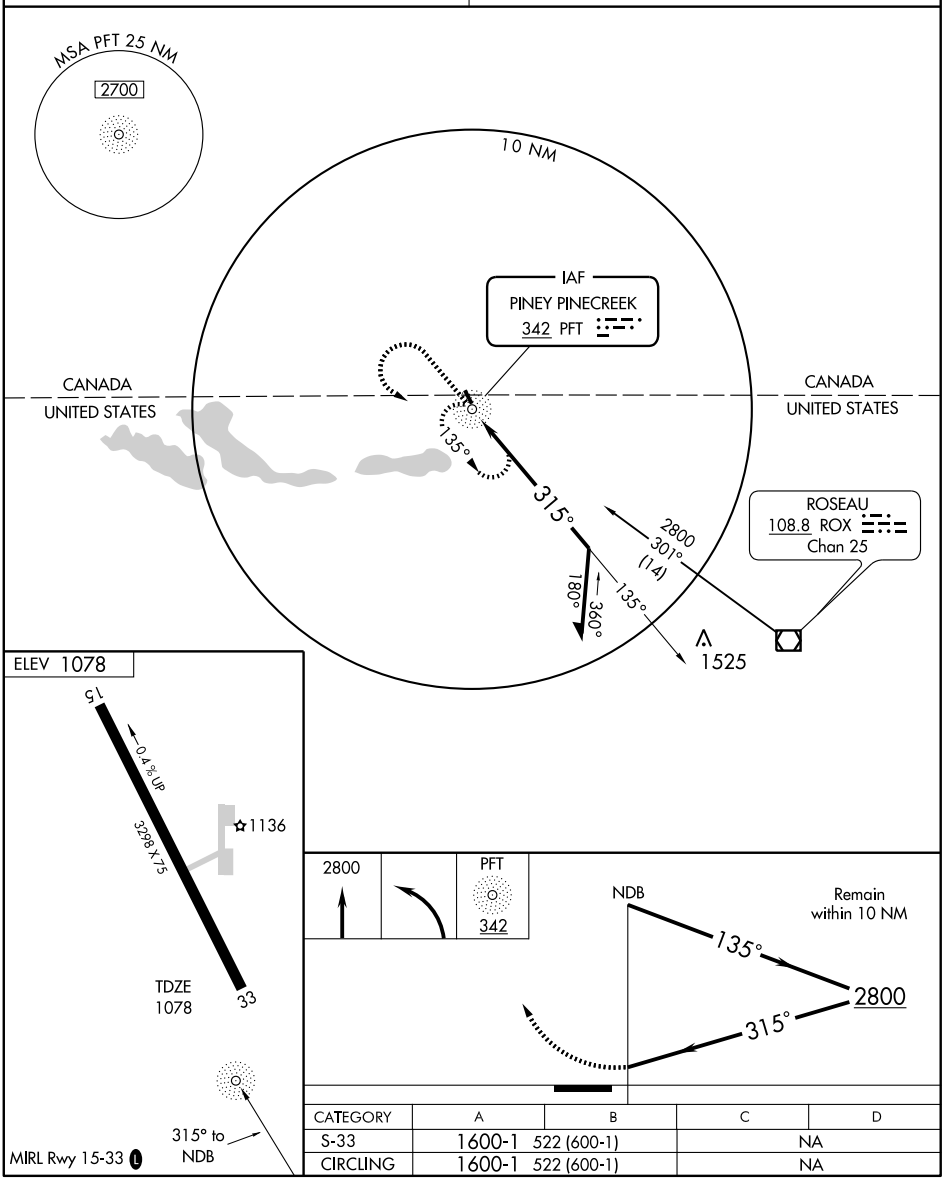
NA

Use Roseau, MN altimeter setting.

MISSED APPROACH: Climb to 2800 then left turn direct PFT NDB and hold.

MINNEAPOLIS CENTER
134.75 251.1

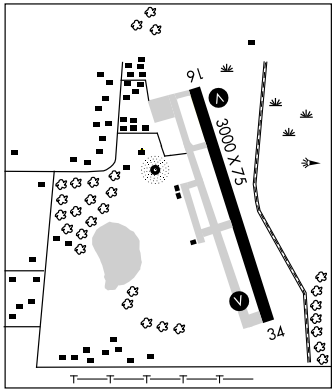
UNICOM
122.8 (CTAF) L



CATEGORY	A	B	C	D
S-33	1600-1	522 (600-1)	NA	
CIRCLING	1600-1	522 (600-1)	NA	

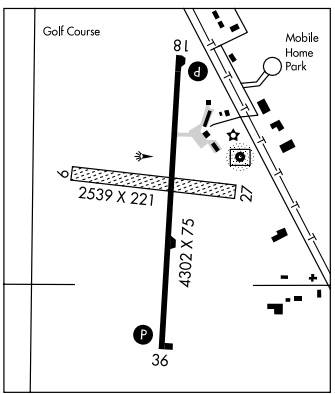
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

PINE RIVER RGNL (PWC) 1 E UTC−6(−5DT) N46°43.49′ W94°22.90′ **TWIN CITIES**
1295 S4 **FUEL** 100LL NOTAM FILE PWC **L–14H**
RWY 16–34: H3000X75 (ASPH) MIRL **IAP**
RWY 16: REIL. VASI(V2L)—GA 3.0° TCH 23′. Trees.
RWY 34: REIL. VASI(V2L)—GA 3.0° TCH 23′. Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡, Sat 1400–1800Z‡. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Deer and waterfowl on and invof arpt. Confirm snow removal and winter conditions with arpt manager call 218–587–2440. Rwy 34 calm wind rwy. MIRL preset on medium ints, increase ints and ACTIVATE VASI Rwy 16 and Rwy 34 and REIL Rwy 16 and Rwy 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.525 (218) 587–3420.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 118.05
RADIO AIDS TO NAVIGATION: NOTAM FILE BRD.
BRAINERD (H) VORTACW 116.9 BRD Chan 116 N46°20.89′ W94°01.55′ 324° 27.0 NM to fld. 1260/3E.
NDB (MHW) 330 PWC N46°43.62′ W94°23.07′23.07′ at fld. NOTAM FILE PWC.



PINEY PINECREEK BORDER (See PINECREEK)

PIPESTONE MUNI (PQN) 1 SE UTC−6(−5DT) N43°59.00′ W96°18.02′ **OMAHA**
1736 B **FUEL** 100LL, JET A, MOGAS NOTAM FILE PQN **L–12I**
RWY 18–36: H4302X75 (ASPH) S–16, D–22 MIRL **IAP**
RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 23′.
RWY 36: REIL. PAPI(P4L)—GA 3.0° TCH 28′.
RWY 09–27: 2539X221 (TURF) 0.5% up E
RWY 09: Trees. **RWY 27:** P-line.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Fuel avbl 24 hrs with credit card. Rwy 09–27 not plowed winter months. Rwy 09–27 marked with yellow cones. ACTIVATE MIRL Rwy 18–36; REIL Rwy 18 and Rwy 36 and PAPI Rwy 18 and Rwy 36—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.375 (507) 825–6895.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.05
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE FSD.
SIOUX FALLS (H) VORTACW 115.0 FSD Chan 97 N43°38.97′ W96°46.87′ 037° 28.9 NM to fld. 1570/9E. **HIWAS.**
NDB/DME (MHW) 284 PQN Chan 28 N43°59.17′ W96°17.79′ at fld. DME Chan 28 paired with VHF frequency 109.10. NOTAM FILE PQN.



NDB/DME PQN 284 DME Chan 28 (109.1)	APP CRS 005°	Rwy Idg 4302 TDZE 1734 Apt Elev 1736

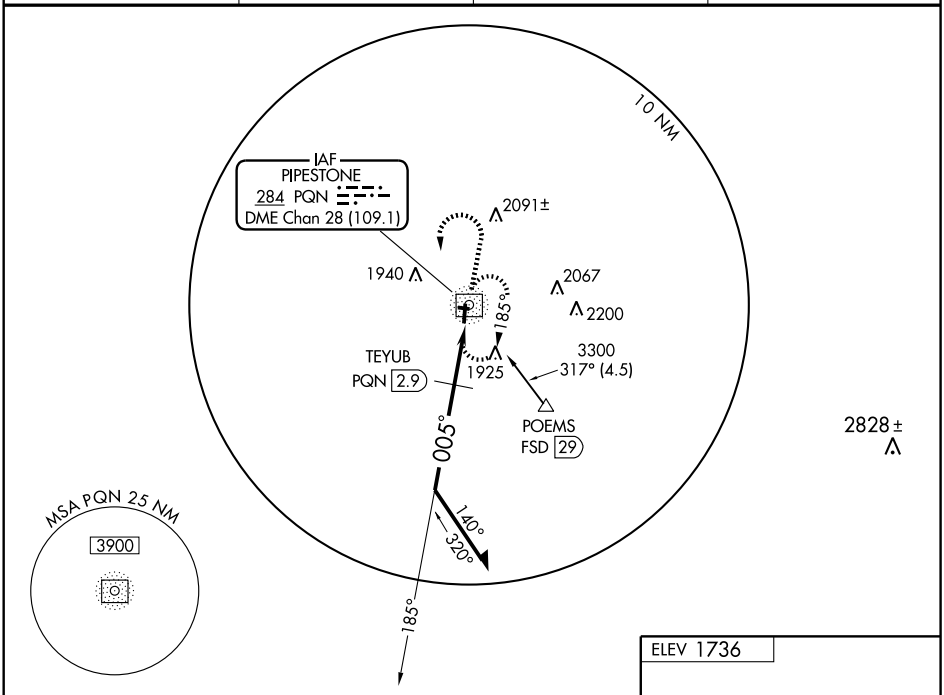
NDB RWY 36

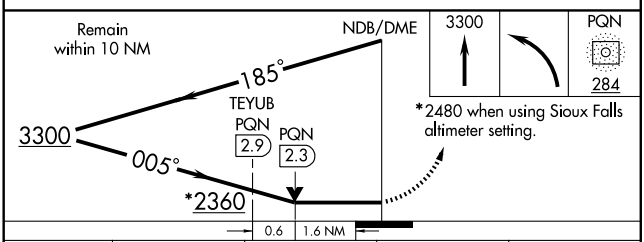
PIPESTONE MUNI (PQN)

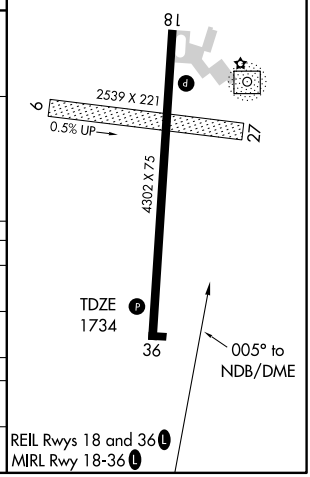
When local altimeter setting not received, use Sioux Falls altimeter setting and increase all MDAs 120 feet, S-36 Cat. B visibility ¼ mile, Cat. C visibility ½ mile and TEYUB FIX MINIMUMS Cat. C visibility ¼ mile.
VDP NA with Sioux Falls altimeter setting.

MISSED APPROACH: Climb to 3300 then left turn direct PQN NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.375	132.05 317.4	121.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-36	2360-1	626 (700-1)	2360-1¾ 626 (700-1¾)	NA
CIRCLING	2360-1	624 (700-1)	2360-1¾ 624 (700-1¾)	NA
TEYUB FIX MINIMUMS				
S-36	2280-1	546 (600-1)	2280-1½ 546 (600-1½)	NA
CIRCLING	2280-1	544 (600-1)	2280-1½ 544 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 18

PIPESTONE MUNI (PQN)

APP CRS	Rwy Idg	4302
163°	TDZE	1736
	Apt Elev	1736

DME/DME RNP -0.3 NA.
When local altimeter setting not received, use Sioux Falls altimeter setting and increase all MDAs 120 feet and Cat C visibility ¼ mile.
VDP NA with Sioux Falls altimeter setting.

MISSED APPROACH: Climb to 3300 direct OKOCI and via 181° track to HEVBA and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.375	132.05 317.4	121.725	122.8 (CTAF) L

Procedure NA for arrivals on FSD VORTAC airway radials 319 CW 046.

(IAF) ASTOE
3800 NoPT 138° (20.9)
2772
GHENT
3800 221° (23.9)
MSA RW18 25 NM
3900
4 NM
163° 343°
(IF/IAF) SAKNE
3800 NoPT 253° (5)
(IAF) UCAVE
(IAF) TIBUC
3800 NoPT 073° (5)
3700 (6) 163°
(FAF) RAYOV
2043
2091±
1940
RW18
2067
2200
OKOCI
1925
181°
3800 018° (33.9)
SIOUX FALLS FSD

MISSED APCH FIX
HEVBA
358° 178°
4 NM

ELEV 1736
163° to RW18
TDZE 1736
18
2539 X 221
0.5% UP
6
27
4302 X 75
36

MIRL Rwy 18-36 L
REIL Rwys 18 and 36 L

4 NM Holding Pattern
SAKNE
3800
343°
163°
163°
3700
RAYOV
1.3 NM to RW18
RW18
3.02°
TCH 40
VGSI and descent angles not coincident
6 NM
4.7 NM
1.3

3300	OKOCI	181° track	HEVBA

CATEGORY	A	B	C	D
LNAV MDA	2180-1 444 (500-1)		2180-1¼ 444 (500-1¼)	NA
CIRCLING	2180-1 444 (500-1)	2200-1 464 (500-1)	2280-1½ 544 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 36

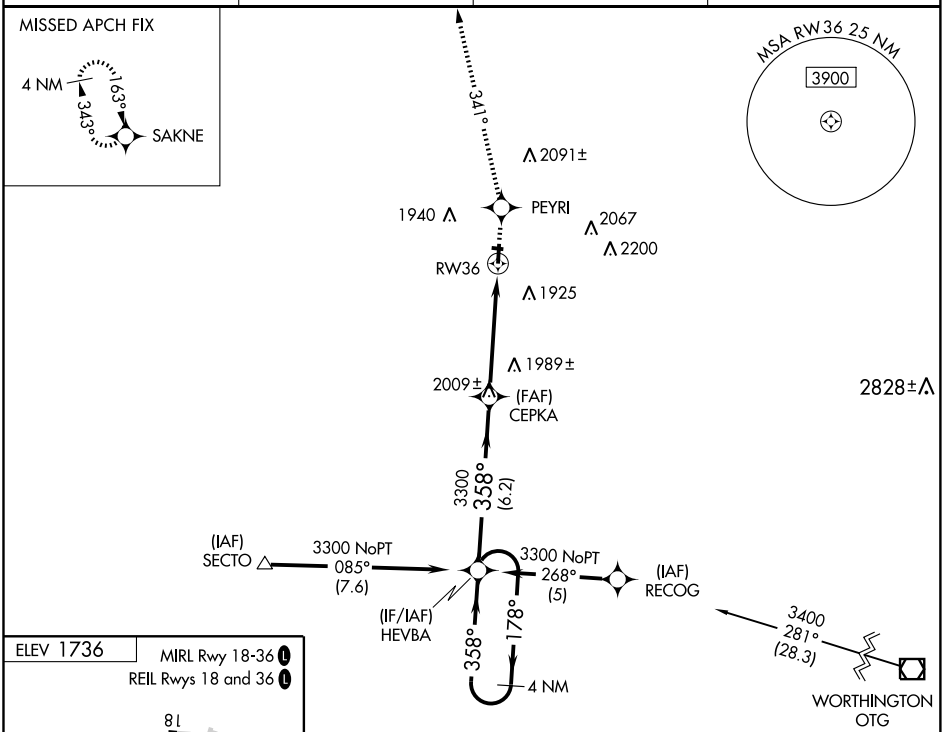
PIPESTONE MUNI (PQN)

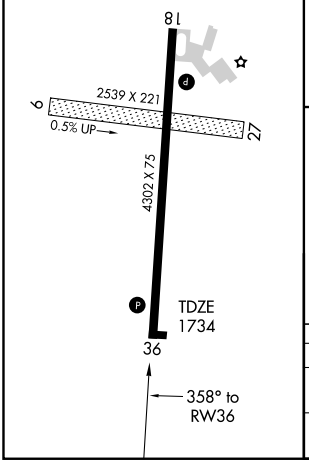
APP CRS	Rwy Idg	4302
358°	TDZE	1734
	Apt Elev	1736

DME/DME RNP -0.3 NA.
When local altimeter setting not received, use Sioux Falls altimeter setting and increase alll MDAs 120 feet and Cat. C visibilities ¼ mile. VDP NA with Sioux Falls altimeter setting.

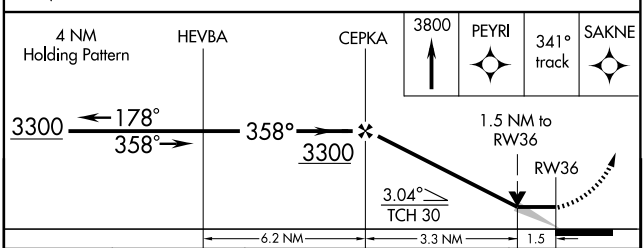
MISSED APPROACH: Climb to 3800 direct PEYRI and via 341° track to SAKNE and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
118.375	132.05 317.4	121.725	122.8 (CTAF) L





Procedure NA for arrivals at SECTO via V148 southwest bound and arrivals at OTG VOR/DME via V250 northeast bound.

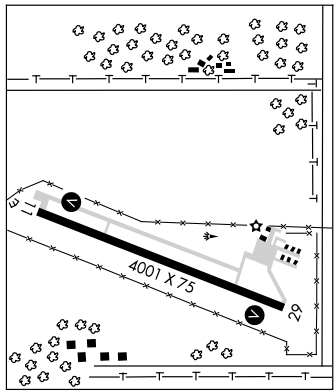


CATEGORY	A	B	C	D
LNAV MDA	2240-1	506 (600-1)	2240-1½ 506 (600-1½)	NA
CIRCLING	2240-1	504 (600-1)	2280-1½ 544 (600-1½)	NA

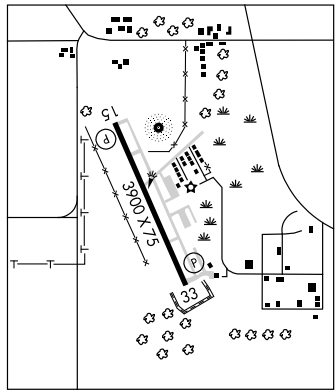
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

PRESTON

FILLMORE CO (FKA) 4 W UTC−6(−5DT) N43°40.61′ W92°10.79′ — CHICAGO
1277 B NOTAM FILE FKA — L–28F
RWY 11–29: H4001X75 (ASPH) MIRL — IAP
RWY 11: VASI(V2L)—GA 3.0° TCH 25′. Trees.
RWY 29: VASI(V2L)—GA 3.0° TCH 25′. Road.
AIRPORT REMARKS: Unattended. Ultralights on and invof arpt. ACTIVATE MIRL Rwy 11–29, VASI Rwy 11 and Rwy 29—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.550 (507) 765–2182.
COMMUNICATIONS: CTAF 122.9
ROCHESTER APP/DEP CON 119.8 (1100–0500Z‡)
MINNEAPOLIS CENTER APP/DEP CON 132.35 (0500–1100Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE RST.
ROCHESTER (L) VORW/DME 112.0 RST Chan 57 N43°46.97′ W92°35.82′ 104° 19.2 NM to fld. 1389/5E. **HIWAS.**



PRINCETON MUNI (PNM) 1 SW UTC−6(−5DT) N45°33.59′ W93°36.49′ — TWIN CITIES
980 B S2 **FUEL** 100LL NOTAM FILE PNM — L–14H
RWY 15–33: H3900X75 (ASPH) MIRL — IAP
RWY 15: REIL. PAPI(P4R)—GA 3.0° TCH 41′. Trees.
RWY 33: REIL. PAPI(P4R)—GA 3.0° TCH 41′. Trees.
AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Occasional helicopter ops lgtd hospital helipad 1 NM ESE Rwy 15–33. ACTIVATE MIRL Rwy 15–33—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.025 (763) 389–0615. 368 PNM.
COMMUNICATIONS: CTAF/UNICOM 123.0
PRINCETON FSS (PNM) on arpt.
RCO 122.2 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 121.05
RADIO AIDS TO NAVIGATION: NOTAM FILE STC.
ST CLOUD (T) VORW/DME 112.1 STC Chan 58 N45°32.96′ W94°03.52′ 085° 19.0 NM to fld. 1023/3E. VOR unmonitored.
NDB (MHW) 368 PNM N45°33.88′ W93°36.46′ at fld. NOTAM FILE PNM.



PYKLA N46°50.77′ W92°21.30′ NOTAM FILE DLH. — GREEN BAY
NDB (MHW/LOM) 379 DL 089° 6.7 NM to Duluth Intl. Unmonitored. — L–14I

QUENTIN AANENSON FLD (See LUVERNE)

RAIZE N48°28.88′ W93°16.68′ NOTAM FILE INL. — TWIN CITIES
NDB (H/LOM) 353 IN 310° 7.1 NM to Falls Intl. — L–14H

APP CRS	Rwy Idg	4001
286°	TDZE	1276
	Apt Elev	1276

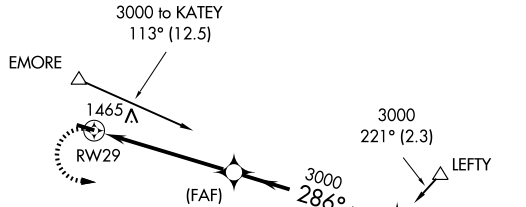
RNAV (GPS) RWY 29

PRESTON/ FILLMORE COUNTY (FKA)

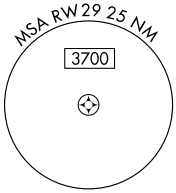
When VGSI inoperative, procedure NA at night.
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Rochester Intl altimeter setting and increase all MDAs 60 feet and LNAV and Circling Cat. C visibilities ¼ mile.

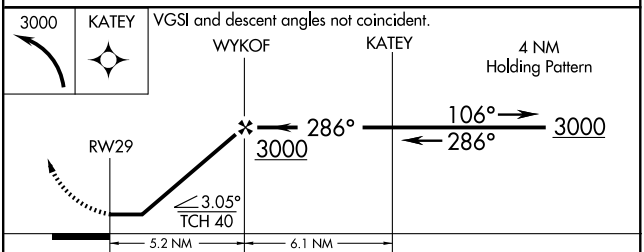
MISSED APPROACH: Climbing left turn to 3000 direct KATEY and hold

AWOS-3	ROCHESTER APP CON★	CTAF
118.550	119.8 251.125	122.9 (L)

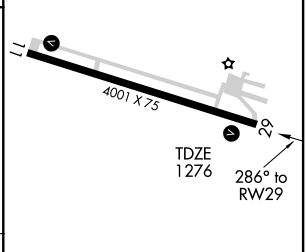


2642





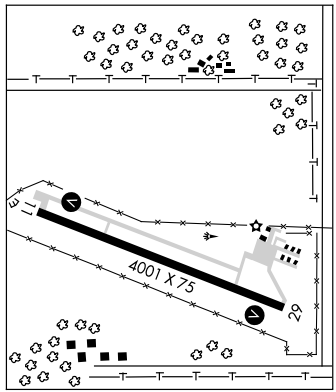
CATEGORY	A	B	C	D
LNAV MDA	1760-1 484 (500-1)		1760-1¼ 484 (500-1¼)	NA
CIRCLING	1760-1 484 (500-1)	1820-1 544 (600-1)	1820-1½ 544 (600-1½)	NA



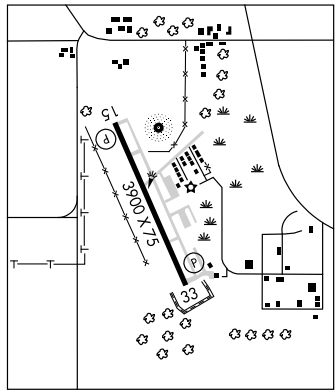
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

PRESTON

FILLMORE CO (FKA) 4 W UTC−6(−5DT) N43°40.61′ W92°10.79′ — CHICAGO
1277 B NOTAM FILE FKA — L–28F
RWY 11–29: H4001X75 (ASPH) MIRL — IAP
RWY 11: VASI(V2L)—GA 3.0° TCH 25′. Trees.
RWY 29: VASI(V2L)—GA 3.0° TCH 25′. Road.
AIRPORT REMARKS: Unattended. Ultralights on and invof arpt. ACTIVATE MIRL Rwy 11–29, VASI Rwy 11 and Rwy 29—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.550 (507) 765–2182.
COMMUNICATIONS: CTAF 122.9
ROCHESTER APP/DEP CON 119.8 (1100–0500Z‡)
MINNEAPOLIS CENTER APP/DEP CON 132.35 (0500–1100Z‡)
RADIO AIDS TO NAVIGATION: NOTAM FILE RST.
ROCHESTER (L) VORW/DME 112.0 RST Chan 57 N43°46.97′ W92°35.82′ 104° 19.2 NM to fld. 1389/5E. **HIWAS.**



PRINCETON MUNI (PNM) 1 SW UTC−6(−5DT) N45°33.59′ W93°36.49′ — TWIN CITIES
980 B S2 **FUEL** 100LL NOTAM FILE PNM — L–14H
RWY 15–33: H3900X75 (ASPH) MIRL — IAP
RWY 15: REIL. PAPI(P4R)—GA 3.0° TCH 41′. Trees.
RWY 33: REIL. PAPI(P4R)—GA 3.0° TCH 41′. Trees.
AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Occasional helicopter ops lgtd hospital helipad 1 NM ESE Rwy 15–33. ACTIVATE MIRL Rwy 15–33—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.025 (763) 389–0615. 368 PNM.
COMMUNICATIONS: CTAF/UNICOM 123.0
PRINCETON FSS (PNM) on arpt.
RCO 122.2 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 121.05
RADIO AIDS TO NAVIGATION: NOTAM FILE STC.
ST CLOUD (T) VORW/DME 112.1 STC Chan 58 N45°32.96′ W94°03.52′ 085° 19.0 NM to fld. 1023/3E. VOR unmonitored.
NDB (MHW) 368 PNM N45°33.88′ W93°36.46′ at fld. NOTAM FILE PNM.



PYKLA N46°50.77′ W92°21.30′ NOTAM FILE DLH. — GREEN BAY
NDB (MHW/LOM) 379 DL 089° 6.7 NM to Duluth Intl. Unmonitored. — L–14I

QUENTIN AANENSON FLD (See LUVERNE)

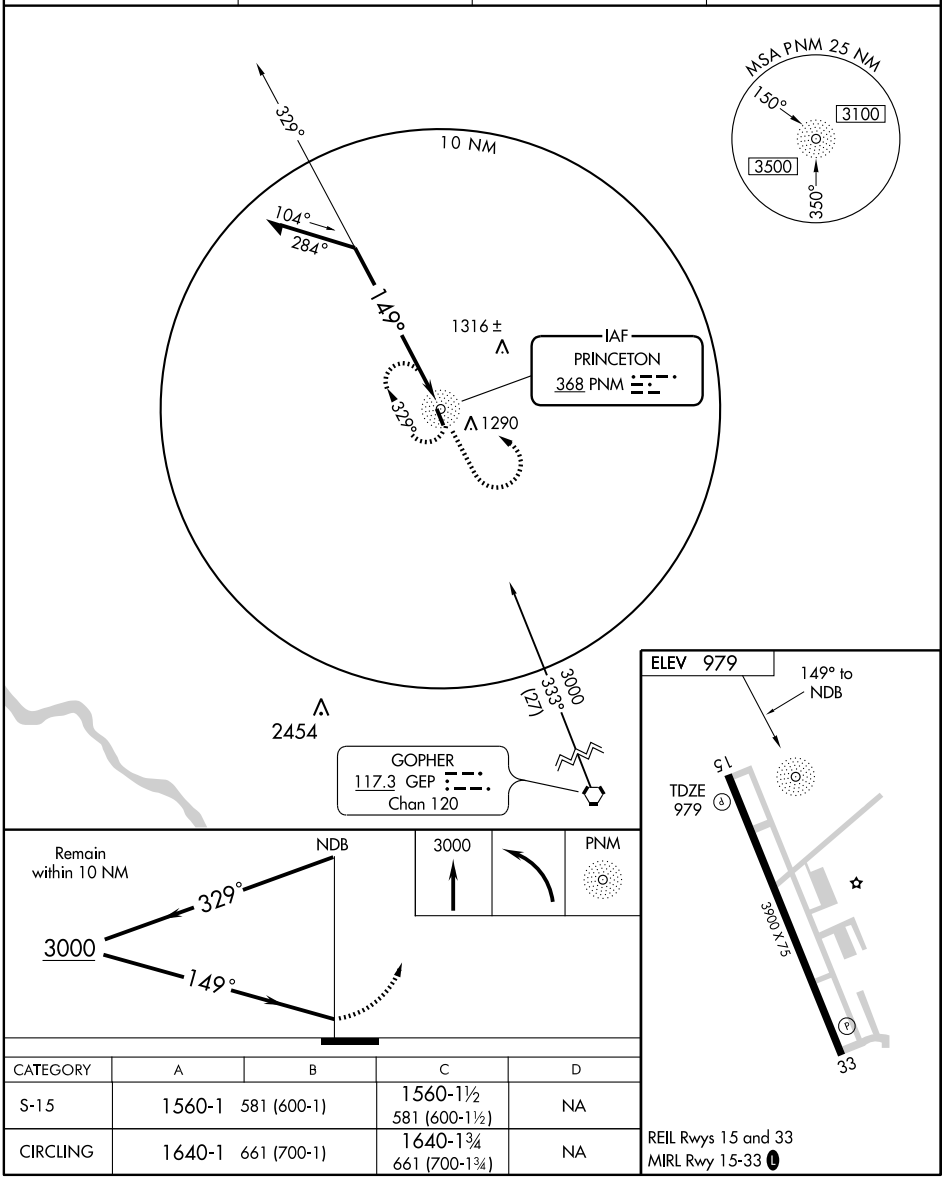
RAIZE N48°28.88′ W93°16.68′ NOTAM FILE INL. — TWIN CITIES
NDB (H/LOM) 353 IN 310° 7.1 NM to Falls Intl. — L–14H

NDB PNM 368	APP CRS 149°	Rwy Idg 3900 TDZE 979 Apt Elev 979

NDB RWY 15
PRINCETON MUNI (PNM)

MISSED APPROACH: Climb to 3000 then left turn direct PNM NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	PRINCETON RADIO	UNICOM
119.025	121.05 397.9	122.2	123.0 (CTAF) L



CATEGORY	A	B	C	D
S-15	1560-1	581 (600-1)	1560-1½ 581 (600-1½)	NA
CIRCLING	1640-1	661 (700-1)	1640-1¾ 661 (700-1¾)	NA

REIL Rwys 15 and 33
MIRL Rwy 15-33 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	3900
159°	TDZE	979
	Apt Elev	979

RNAV (GPS) RWY 15

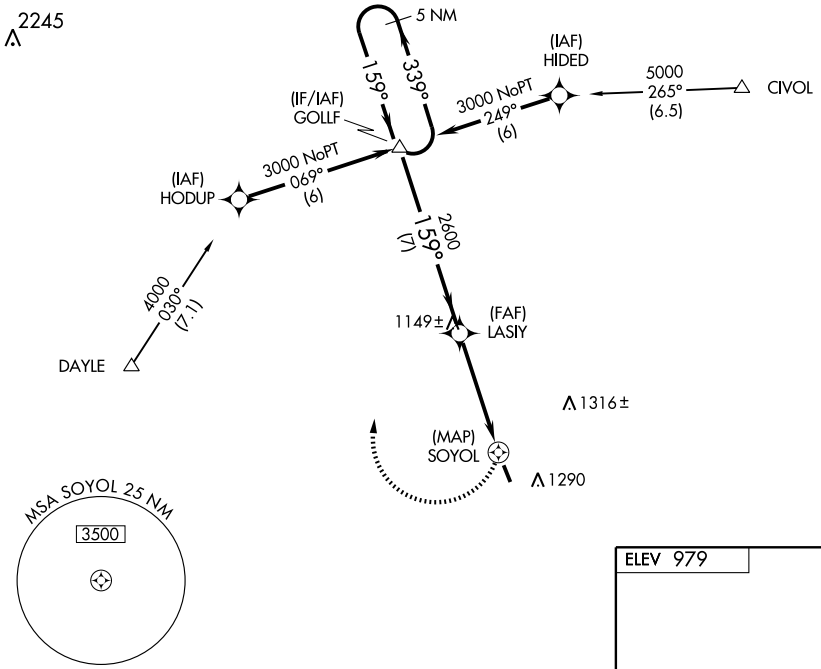
PRINCETON MUNI (PNM)

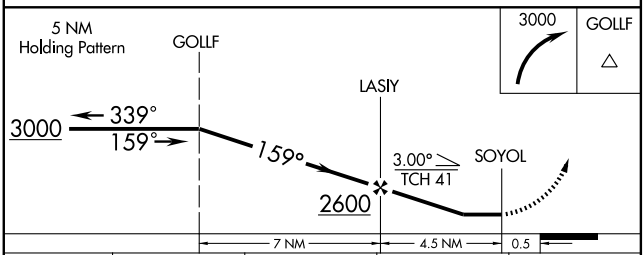
When VGSI inoperative, procedure NA at night.
DME/DME RNP-0.3 NA.
Circling Rwy 33 NA at night.

MISSED APPROACH: Climbing right turn to 3000 direct GOLLF and hold.

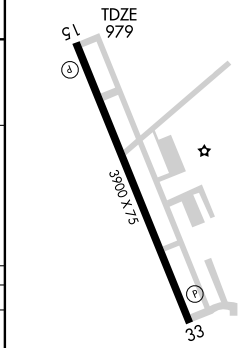
AWOS-3	MINNEAPOLIS CENTER	PRINCETON RADIO	UNICOM
119.025	121.05 397.9	122.2	123.0 (CTAF) L

Procedure NA for arrivals on V413 southbound.





CATEGORY	A	B	C	D
LNAV MDA	1380-1	401 (500-1)	1380-1¼ 401 (500-1¼)	NA
CIRCLING	1640-1	661 (700-1)	1640-1¾ 661 (700-1¾)	NA



REIL Rwys 15 and 33
MIRL Rwy 15-33 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 33

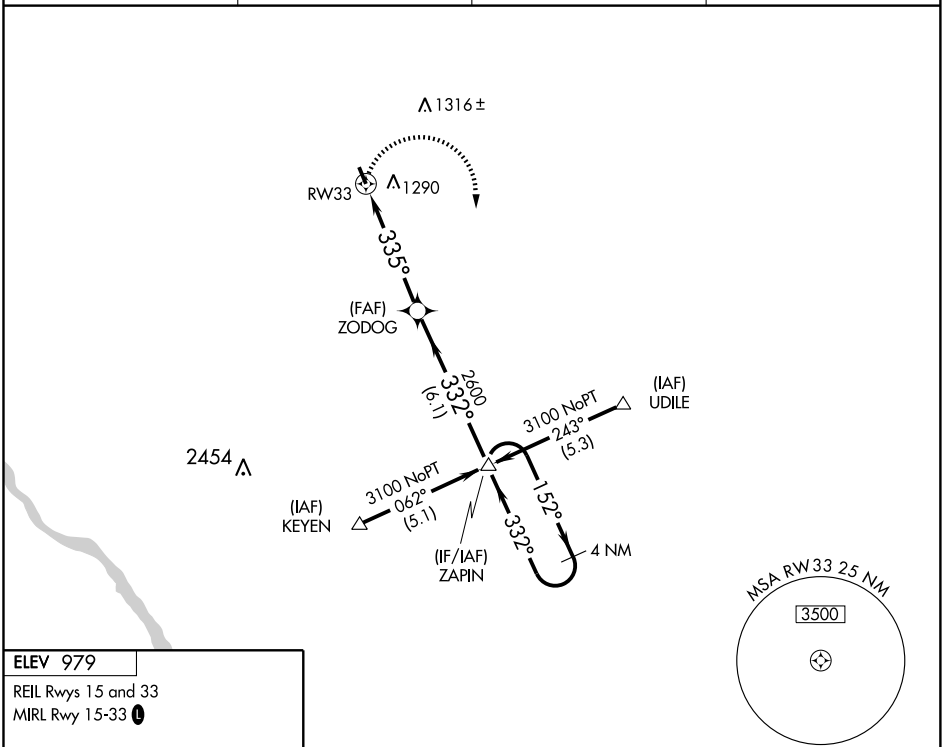
PRINCETON MUNI (PNM)

APP CRS	Rwy Idg	3900
335°	TDZE	979
	Apt Elev	979

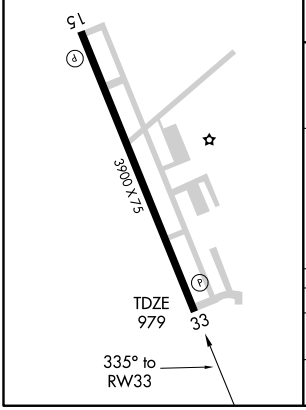
Procedure NA at night.
DME/DME RNP- 0.3 NA.

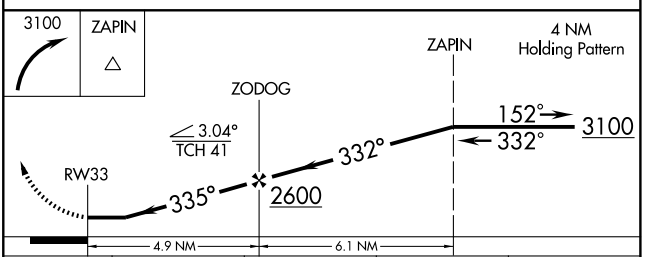
MISSED APPROACH: Climbing right turn to 3100 direct ZAPIN and hold.

AWOS-3	MINNEAPOLIS CENTER	PRINCETON RADIO	UNICOM
119.025	121.05 397.9	122.2	123.0 (CTAF) L



ELEV 979
REIL Rwys 15 and 33
MIRL Rwy 15-33 L





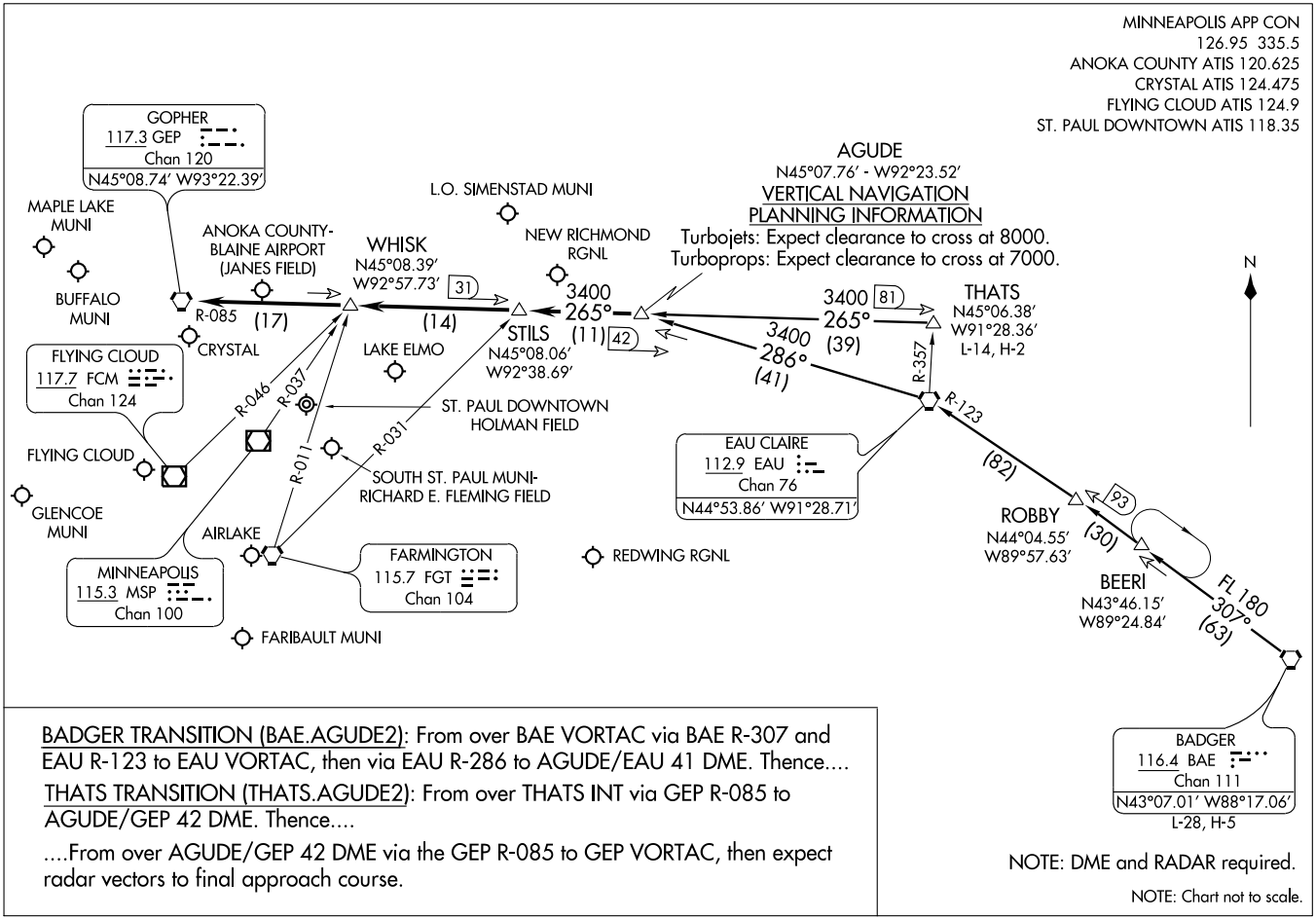
CATEGORY	A	B	C	D
LNAV MDA	1500-1	521 (600-1)	1500-1½ 521 (600-1½)	NA
CIRCLING	1640-1	661 (700-1)	1640-1¾ 661 (700-1¾)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

AGUDE TWO ARRIVAL

(AGUDE.AGUDE2) 10154

MINNEAPOLIS-ST. PAUL, MINNESOTA



BADGER TRANSITION (BAE.AGUDE2): From over BAE VORTAC via BAE R-307 and EAU R-123 to EAU VORTAC, then via EAU R-286 to AGUDE/EAU 41 DME. Thence....

THATS TRANSITION (THATS.AGUDE2): From over THATS INT via GEP R-085 to AGUDE/GEP 42 DME. Thence....

....From over AGUDE/GEP 42 DME via the GEP R-085 to GEP VORTAC, then expect radar vectors to final approach course.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

(AGUDE.AGUDE2) 10154

AGUDE TWO ARRIVAL

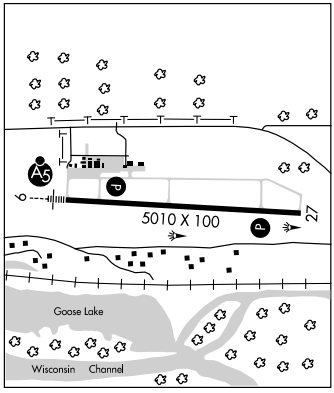
ST-263 (FAA)

MINNEAPOLIS-ST. PAUL, MINNESOTA

RAY S MILLER AAF (CAMP RIPLEY) (RYM) ARNG 1 NW UTC−6(−5DT) **TWIN CITIES**
N46°05.48′ W94°21.63′ **H–2J, L–14H**
1150 NOTAM FILE RYM Not insp. **DIAP**
RWY 13–31: H6100X100 (ASPH) PCN 27 F/A/W/T HIRL
RWY 31: MALSF.
RWY 132–312: 3500X80 (GRVL)
MILITARY SERVICE: LGT HIRL Rwy 13–31 opr low ints, to increase ints ACTIVATE—126.2 MALSF Rwy 31 opr when HIRL reach step 3. **FUEL** J8
MILITARY REMARKS: Opr 1400–2130Z‡, other times 48 hr prior notice rqr. **RSTD** PPR. Base OPS DSN 871–2781/2779/2780, C320–616–2781/2779/2780. **CAUTION** Rwy edge lgts positioned 25′ from usable rwy sfc. **NS ABTMT** Procedure in effect. **MISC** Winds are estimated due to FMQ–13 wind sensors being accurate to within only +/−4 Kts. ATC/Wx will not include/relay wind correction into forecast phraseology. Therefore, aircrews will incorporate a +/−4 Kts accuracy into their decision making process for flying opr. Parking area capacity designated for 3 C130 acft simultaneously. Assault Strip marking center 3500′ of rwy, 750′ ovrn both ends. Ctc Base OPS for Assault Strip lgt.
WEATHER DATA SOURCES: AWOS–3 148.35 360.25 (C320) 632–7500.
COMMUNICATIONS:
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 118.05 239.0
MILLER TOWER 126.2 254.4 49.20 Mon–Fri 1400Z‡–2200Z‡, for NSTD hrs check NOTAMS. **CLNC DEL** 126.2
MILLER OPS 49.65 **RANGE CONTROL** 304.3 36.1
AIRSPACE: CLASS D Mon–Fri 1400Z‡–2200Z‡, for NSTD hrs check NOTAMS, other times CLASS E.
RADIO AIDS TO NAVIGATION: NOTAM FILE BRD.
BRAINERD (H) VORTACW 116.9 BRD Chan 116 N46°20.89′ W94°01.55′ 219° 20.8 NM to fld. 1260/3E.
CAMP RIPLEY (T) TACAN Chan 48 RYM (111.1) N46°05.46′ W94°21.28′ at fld. 1149/3E. NOTAM FILE PNM. Unmonitored when Miller OPS clsd. Other times 48 hr prior notice rqr.
RIPLEY NDB (MHW) 404 XCR N46°04.75′ W94°20.61′ at fld. NOTAM FILE PNM.
ILS/DME 111.1 I–RYM Chan 48 Rwy 31. Class IE. GS unusable for coupled approaches blo 1660′ MSL. Unmonitored when Miller OPS clsd.

RED LAKE FALLS MUNI (D81) 3 S UTC−6(−5DT) N47°49.50′ W96°15.47′ **TWIN CITIES**
1061 B NOTAM FILE PNM
RWY 15–33: H2500X60 (ASPH) LIRL (NSTD)
RWY 15: Sign.
AIRPORT REMARKS: Unattended. Ultralights on and invof arpt. Rwy 15–33 NSTD LIRL; lgts 40 feet off sides of rwy.
COMMUNICATIONS: CTAF 122.9

RED WING RGNL (RGK) 3 NE UTC−6(−5DT) N44°35.36′ W92°29.10′ **GREEN BAY**
778 B S4 **FUEL** 100LL, JET A NOTAM FILE RGK **H–2J, L–12J, 14I, A**
RWY 09–27: H5010X100 (ASPH) S–30, D–75 HIRL **IAP**
RWY 09: MALSR. PAPI(P4L)—GA 3.0° TCH 35′.
RWY 27: REIL. PAPI(P4L)—GA 3.16° TCH 30′. Trees.
AIRPORT REMARKS: Attended Mon–Sat 1400–2300Z‡, Sun 1600–2200Z‡. 24hr credit card fuel avbl. Deer on and invof arpt. For NS ABTMT procedure ctc aprt manager 651–385–3623. Red Wing Rgnl is physically located in Wisconsin. ACTIVATE HIRL Rwy 09–27, MALSR Rwy 09, REIL Rwy 27, PAPI Rwy 09 and Rwy 27—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.25 (715) 594–3763.
COMMUNICATIONS: CTAF/UNICOM 123.05
RED WING RCO 122.6 (GREEN BAY RADIO)
Ⓡ **MINNEAPOLIS APP/DEP CON** 121.2
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
FARMINGTON (H) VORTAC 115.7 FGT Chan 104 N44°37.86′ W93°10.92′ 089° 30.0 NM to fld. 972/6E.
REGUE NDB (LOM) 274 RG N44°35.87′ W92°38.85′ 092° 7 NM to fld.
ILS 110.1 I–RGK Rwy 09 LOM REGUE NDB.



REDWOOD FALLS N44°28.04′ W95°07.69′ NOTAM FILE RWF. **TWIN CITIES**
(H) VORW/DME 113.3 RWF Chan 80 016° 5.2 NM to Redwood Falls Muni. 1061/7E. **HIWAS.** **H–2H, L–12I**
RCO 122.4 (PRINCETON RADIO)

AL-6662 (FAA)

ILS RWY 9

RED WING RGNL (RGK)

LOC I-RGK	APP CRS	Rwy Idg	5010
110.1	091°	TDZE	778
		Apt Elev	780

T
NA

MALSR

MISSED APPROACH: Climb to 3000 then right turn direct REGUE LOM and hold.

AWOS-3	MINNEAPOLIS APP CON	UNICOM
119.25	121.2 357.4	123.05 (CTAF) L

ADF REQUIRED

3400
130°
(45.2)

GOPHER
117.3 GEP
Chan 120

1555

10 NM

1352

1288

LOCALIZER 110.1
I-RGK

1415

1470

3000
089°
(23)

271°

091°
1 min
271°

091°

949

1177±

FARMINGTON
115.7 FGT
Chan 104

LOM/IAF
REGUE
274 RG

1397

1490

1460

1455

1328±

MSA RG 25 NM
2800

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

One Minute
Holding Pattern

LOM

2964

3000

271°

091°

3000

GS 3.00°
TCH 50

6.6 NM

3000

RG

274

ELEV 780

TDZE
778

5010 X 100

27

091° 6.6 NM
from FAF

CATEGORY	A	B	C	D
S-ILS 9	978-½ 200 (200-½)			
S-LOC 9	1380-½ 602 (600-½)		1380-1¼ 602 (600-1¼)	1380-1½ 602 (600-1½)
CIRCLING	1480-1 700 (700-1)	1520-1 740 (800-1)	1540-2¼ 760 (800-2¼)	1540-2½ 760 (800-2½)

REIL Rwy 27 L
HIRL Rwy 9-27 L

FAF to MAP 6.6 NM					
Knots	60	90	120	150	180
Min:Sec	6:36	4:24	3:18	2:38	2:12

AL-6662 (FAA)

RNAV (GPS) RWY 9

RED WING RGNL (RGK)

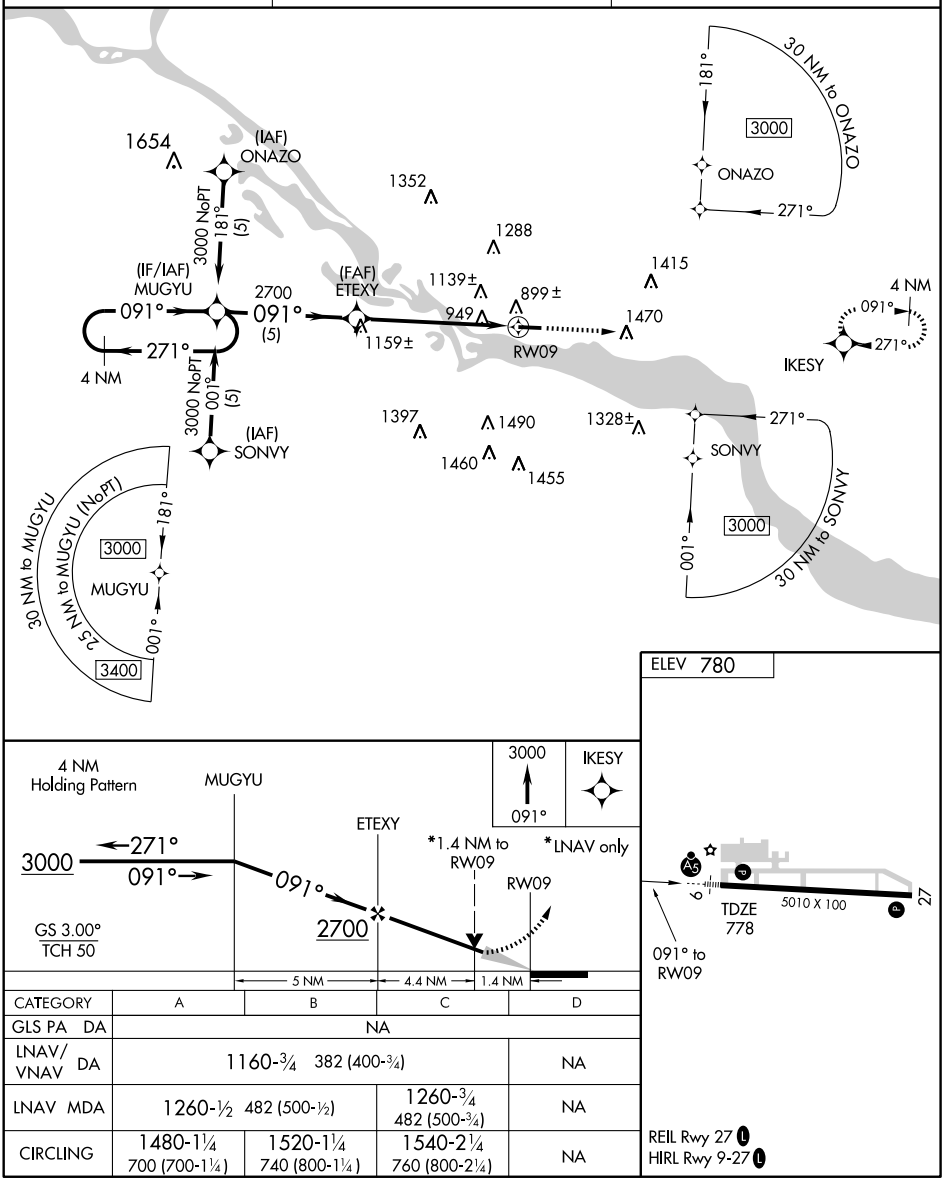
APP CRS	Rwy Idg	5010
091°	TDZE	778
	Apt Elev	780

Baro VNAV NA below -16°C (4°F).
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MALSR

MISSED APPROACH: Climb to 3000 via course 091° to IKESY WP and hold.

AWOS-3	MINNEAPOLIS APP CON	UNICOM
119.25	121.2 357.4	123.05 (CTAF) L



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	1160-¾ 382 (400-¾)			NA
LNAV MDA	1260-½ 482 (500-½)		1260-¾ 482 (500-¾)	NA
CIRCLING	1480-1¼ 700 (700-1¼)	1520-1¼ 740 (800-1¼)	1540-2¼ 760 (800-2¼)	NA

44°35'N-92°29'W

NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	5010
CH 42618	271°	TDZE	777
W27A		Apt Elev	778

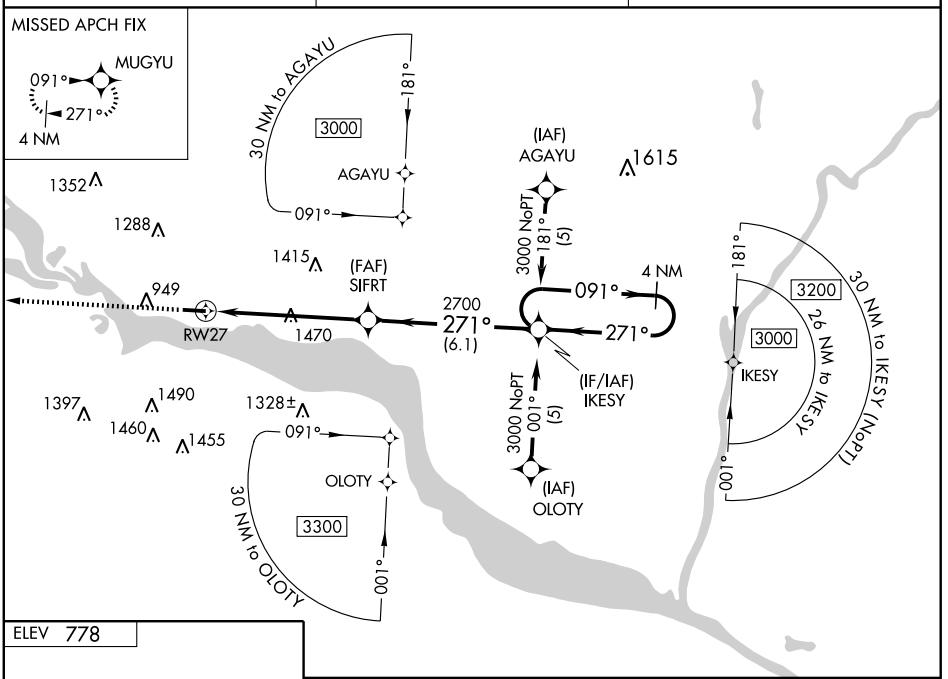
RNAV (GPS) RWY 27

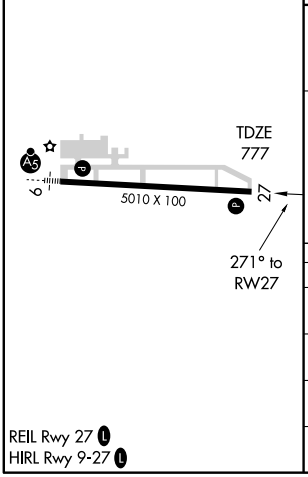
RED WING RGNL (RGK)

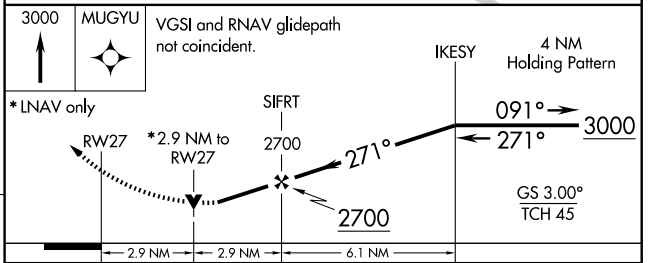
Baro-VNAV NA when using South St. Paul altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use South St. Paul altimeter setting and increase all DA 72 feet and all MDA 80 feet, and increase LNAV/VNAV Cats A, B, C visibility 1 mile. VDP NA when using South St. Paul altimeter setting.

MISSED APPROACH: Climb to 3000 direct MUGYU and hold.

AWOS-3	MINNEAPOLIS APP CON	UNICOM
119.25	121.2 357.4	123.05 (CTAF) L



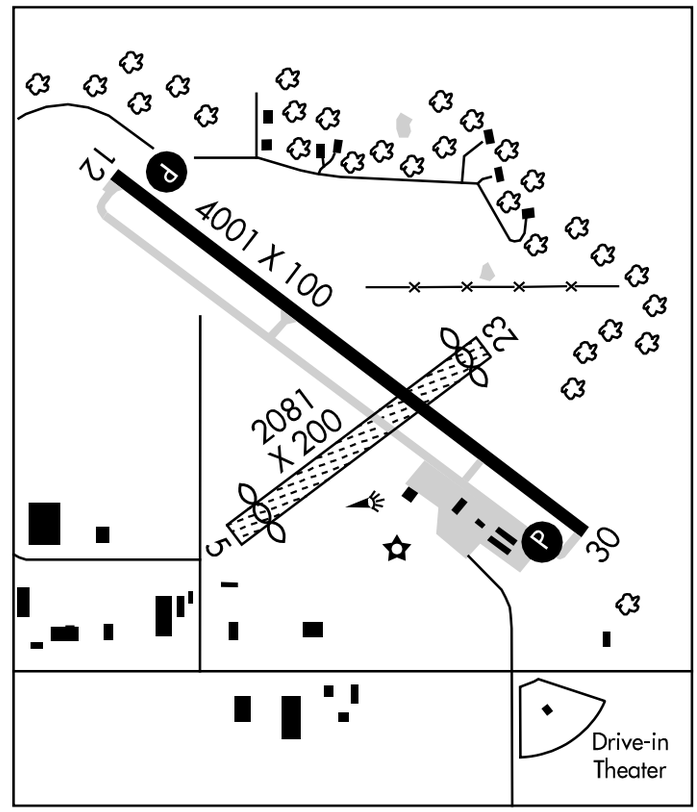




CATEGORY	A	B	C	D
LPV DA	2039-5 1262 (1300-5)			NA
LNAV/VNAV DA	2157-5 1380 (1400-5)			NA
LNAV MDA	1780-1¼ 1003 (1100-1¼)	1780-1½ 1003 (1100-1½)	1780-3 1003 (1100-3)	NA
CIRCLING	1780-1¼ 1002 (1100-1¼)	1780-1½ 1002 (1100-1½)	1780-3 1002 (1100-3)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

REDWOOD FALLS MUNI (RWF) 2 NE UTC−6(−5DT) N44°32.81′ W95°04.92′ **TWIN CITIES**
1024 B S2 **FUEL** 100LL, JET A NOTAM FILE RWF **L–12I**
RWY 12–30: H4001X100 (ASPH) S–23, D–42 MIRL **IAP**
RWY 12: REIL. PAPI(P2L). Trees.
RWY 30: REIL. PAPI(P2L). Hill.
RWY 05–23: 2081X200 (TURF)
RWY 05: Thld dsplcd 330′. Pole.
RWY 23: Thld dsplcd 176′. Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Self serve fuel avb 24 hrs with credit card. Ultralights on and invof arpt. Rwy 05–23 CLOSED winter months. Rwy 05–23 dsplcd thld marked with yellow cones. ACTIVATE MIRL Rwy 12–30 and REIL and PAPI Rwy 12 and Rwy 30—CTAF.
WEATHER DATA SOURCES: ASOS 126.575 (507) 644–3564. **HIWAS** 113.3 RWF.
COMMUNICATIONS: CTAF/UNICOM 123.0
RCO 122.4 (PRINCETON RADIO)
MINNEAPOLIS CENTER APP/DEP CON 127.1
RADIO AIDS TO NAVIGATION: NOTAM FILE RWF.
(H) VORW/DME 113.3 RWF Chan 80 N44°28.04′ W95°07.69′ 016° 5.2 NM to fld. 1061/7E. **HIWAS.**



REGUE N44°35.87′ W92°38.85′ NOTAM FILE RGK. **GREEN BAY**
NDB (LOM) 274 RG 092° 7 NM to Red Wing Rgnl.

REMER MUNI (52Y) 1 N UTC−6(−5DT) N47°04.08′ W93°54.85′ **TWIN CITIES**
1350 NOTAM FILE PNM
RWY 13–31: 2765X154 (TURF)
RWY 13: Trees. **RWY 31:** Trees.
AIRPORT REMARKS: Unattended. Deer on and invof arpt. Ultralight tfc on and invof arpt. Rwy 13–31 marked with orange/white A-frames.
COMMUNICATIONS: CTAF 122.9

RICHARD B. HELGESON (See TWO HARBORS)

RIPLEY N46°04.75′ W94°20.61′ NOTAM FILE PNM. **TWIN CITIES**
NDB (MHW) 404 XCR at Ray S Miller AAF. **L–14H**

ROADD N48°51.77′ W95°14.51′ NOTAM FILE RAD. **TWIN CITIES**
NDB (LOM) 360 SW 315° 6.3 NM to Warroad Intl Mem.

WAAS	APP CRS	Rwy Idg	4001
CH 86610	304°	TDZE	1024
W30A		Apt Elev	1024

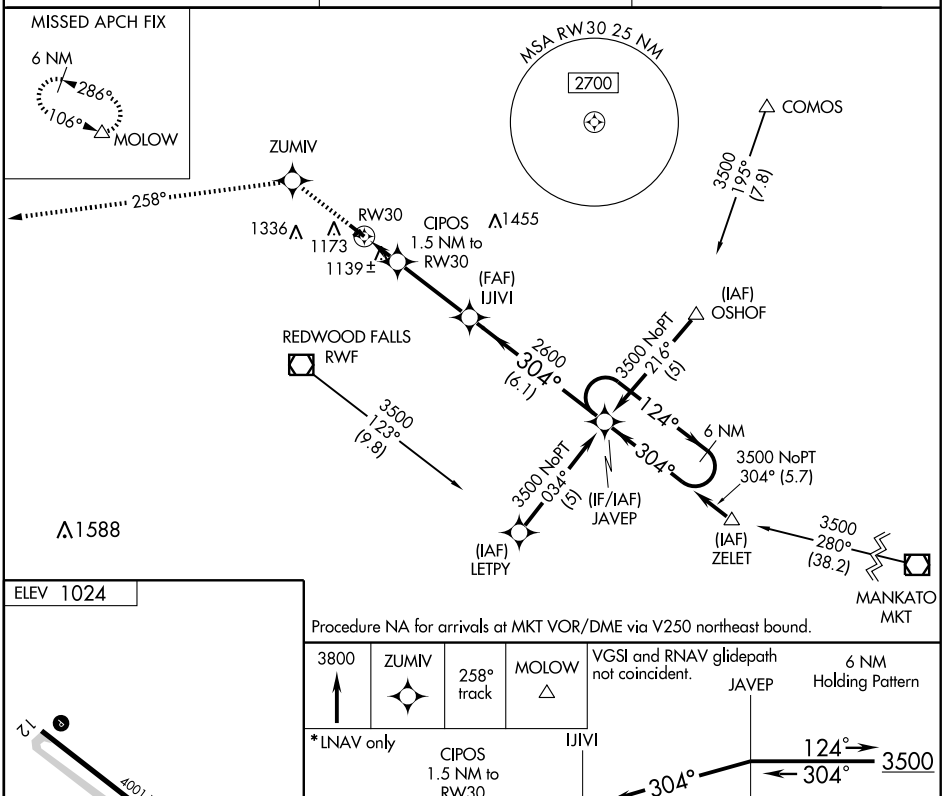
RNAV (GPS) RWY 30

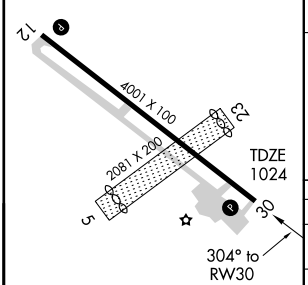
REDWOOD FALLS MUNI (RWF)

DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F).
Baro-VNAV NA when using Olivia Rgnl altimeter setting.
When local altimeter setting not received, use Olivia Rgnl altimeter setting and increase all DA/MDA 40 feet and LNAV Cat C visibility ¼ mile.

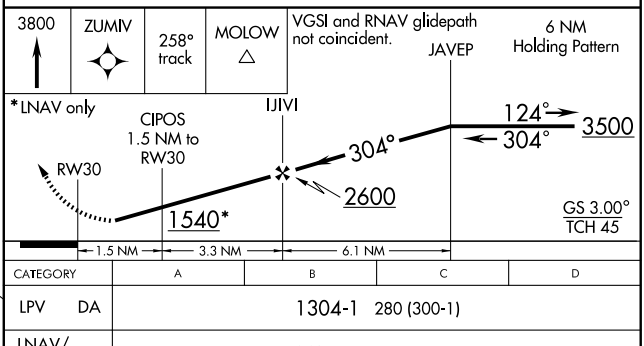
MISSED APPROACH: Climb to 3800 direct ZUMIV and via 258° track to MOLOW and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.575	127.1 290.2	123.0 (CTAF) L





Procedure NA for arrivals at MKT VOR/DME via V250 northeast bound.



CATEGORY	A	B	C	D
LPV DA	1304-1 280 (300-1)			
LNAV/VNAV DA	1440-1½ 416 (500-1½)			
LNAV MDA	1400-1 376 (400-1)			1400-1¼ 376 (400-1¼)
CIRCLING	1480-1 456 (500-1)	1580-1 556 (600-1)	1580-1½ 556 (600-1½)	1700-2¼ 676 (700-2¼)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME RWF	APP CRS	Rwy Idg	N/A
113.3	016°	TDZE	N/A
Chan 80		Apt Elev	1024

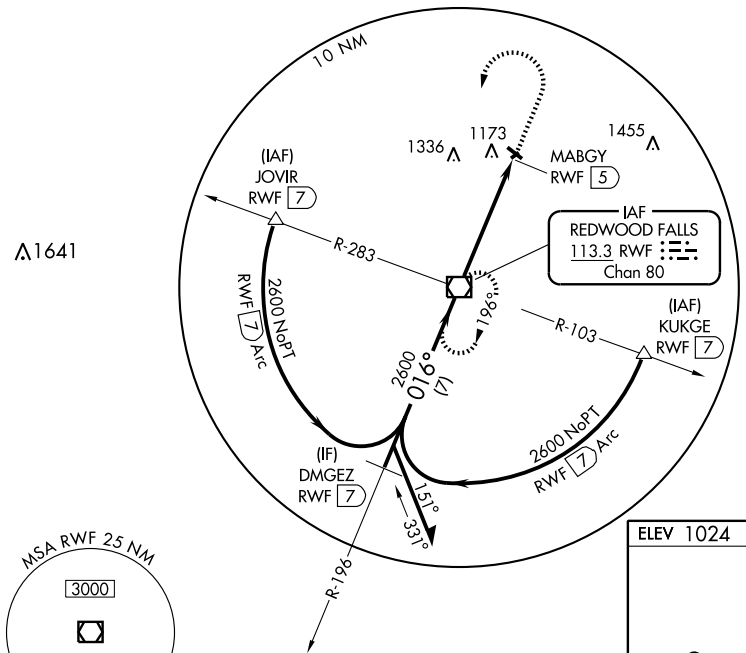
VOR-A

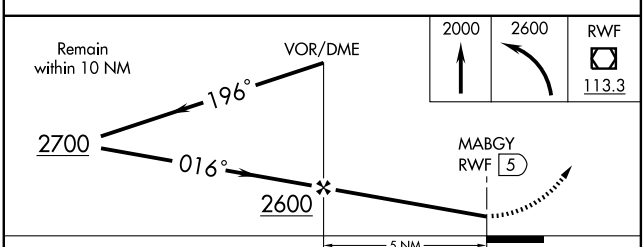
REDWOOD FALLS MUNI (RWF)

When local altimeter setting not received, use Olivia Rgnl altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climb to 2000 then climbing left turn to 2600 direct RWF VOR/DME and hold.

ASOS	MINNEAPOLIS CENTER	UNICOM
126.575	127.1 290.2	123.0 (CTAF) L

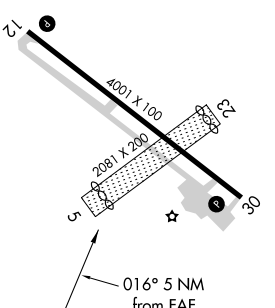




ELEV 1024

MIRL Rwy 12-30 L

REIL Rwys 12 and 30 L



CATEGORY	A	B	C	D
CIRCLING	1540-1 516 (600-1)	1580-1 556 (600-1)	1580-1½ 556 (600-1½)	1700-2¼ 676 (700-2¼)

FAF to MAP 5 NM

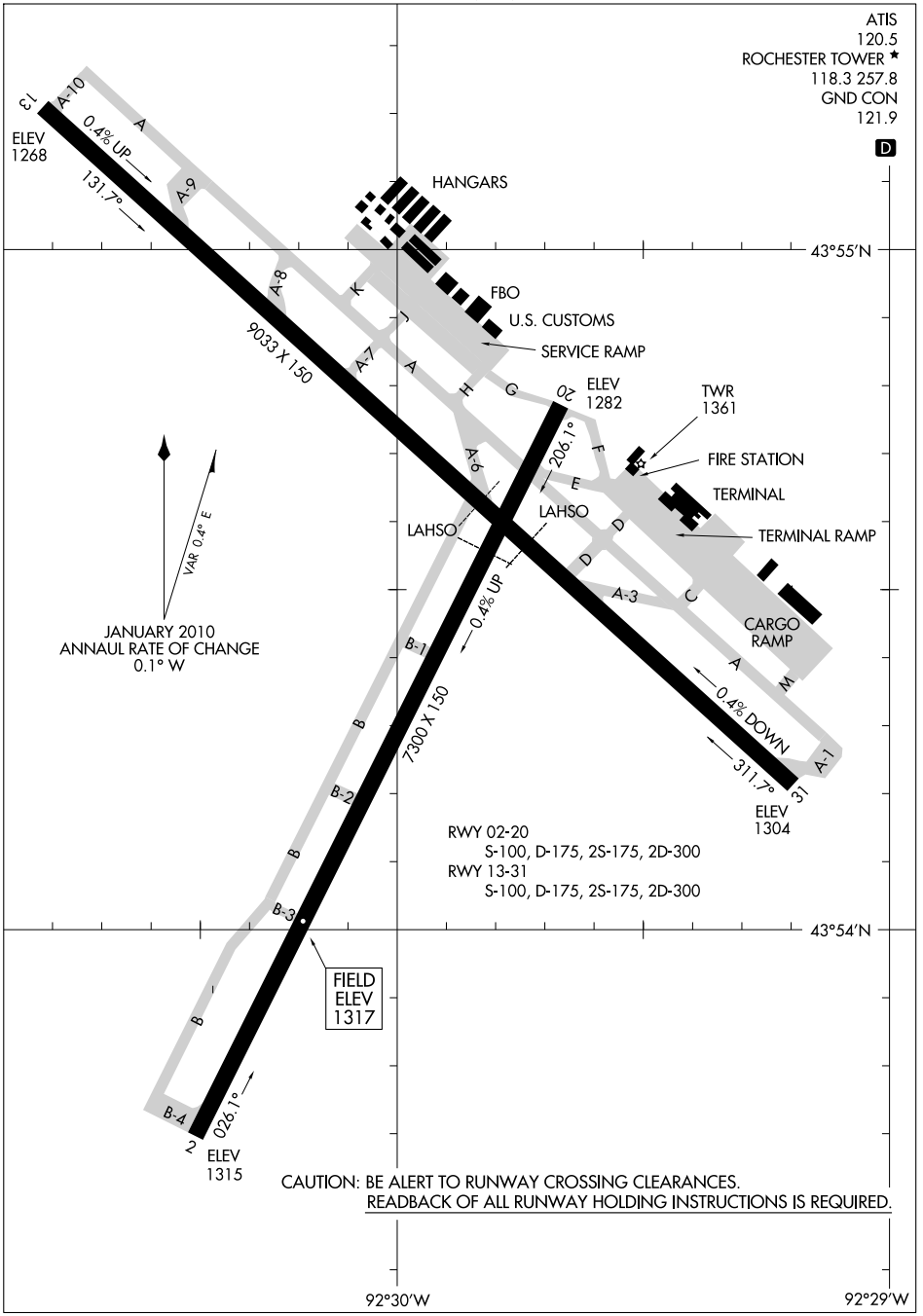
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

AIRPORT DIAGRAM

AL-5041 (FAA)

ROCHESTER INTL (RST)
ROCHESTER, MINNESOTA



NC-1, 21 OCT 2010 to 18 NOV 2010

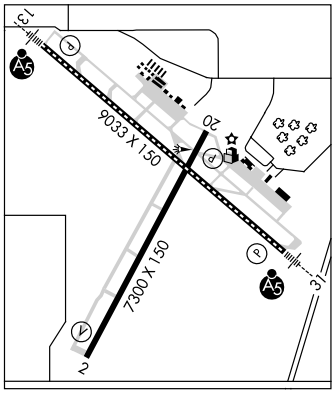
AIRPORT DIAGRAM

ROCHESTER, MINNESOTA
ROCHESTER INTL (RST)

10210

ROCHESTER INTL (RST) 7 SW UTC−6(−5DT) N43°54.50′ W92°30.00′ **CHICAGO**
1317 B S4 **FUEL** 100LL, JET A OX 3, 4 LRA Class I, ARFF Index B **H–2J, L–12J, 28F**
NOTAM FILE RST **IAP, AD**

RWY 13–31: H9033X150 (CONC) S–100, D–175, 2S–175, 2D–300 HIRL CL
RWY 13: MALSR. TDZL. PAPI(P4L)—GA 3.0° TCH 53′. 0.4% up.
RWY 31: MALSR. TDZL. PAPI(P4L)—GA 3.0° TCH 51′. 0.4% down.
RWY 02–20: H7300X150 (CONC–WC) S–100, D–175, 2S–175, 2D–300 MIRL 0.4% up SW
RWY 02: REIL. VASI(V4L)—GA 3.0° TCH 47′.
RWY 20: REIL. PAPI(P4L)—GA 3.05° TCH 50′.



LAND AND HOLD SHORT OPERATIONS

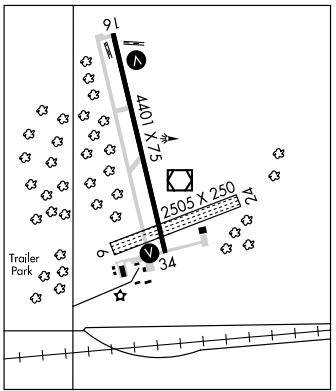
LANDING	HOLD SHORT POINT	DIST AVBL
RWY 02	13–31	5850
RWY 13	02–20	5270
RWY 31	02–20	3200

RUNWAY DECLARED DISTANCE INFORMATION

RWY 02:	TORA–7300	TODA–7300	ASDA–7300	LDA–7300
RWY 13:	TORA–9033	TODA–9033	ASDA–9033	LDA–9033
RWY 20:	TORA–7300	TODA–7300	ASDA–7300	LDA–7300
RWY 31:	TORA–9033	TODA–9033	ASDA–9033	LDA–9033

AIRPORT REMARKS: Attended continuously. Waterfowl on and invof arpt. When twr clsd snow removal equipment operators monitor CTAF. 24 hr PPR for unscheduled air carrier ops with more than 9 passenger seats between 0500–1100Z‡, call 507–254–1161. VASI and PAPIs on continuously. When twr clsd HIRL Rwy 13–31 preset, to increase ints and ACTIVATE MIRL Rwy 02–20 and MALSR Rwy 13 and Rwy 31—CTAF. Rwy 13–31 RVR avbl during twr hrs of ops only. US Customs avbl Mon–Fri 1430–2300Z‡, after hrs and weekends require prior notification, call 507–285–5278.
WEATHER DATA SOURCES: ASOS (507) 285–0298. **HIWAS** 112.0 RST. LLWAS.
COMMUNICATIONS: CTAF 118.3 **ATIS** 120.5 **UNICOM** 122.95
RCO 122.45 (PRINCETON RADIO)
Ⓡ **APP/DEP CON** 119.2 (310°–129°) 119.8 (130°–309°) (1100–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.35 (0500–1100Z‡)
TOWER 118.3 (1100–0500Z‡) **GND CON** 121.9
AIRSPACE: CLASS D svc 1100–0500Z‡ other times CLASS E.
RADIO AIDS TO NAVIGATION: NOTAM FILE RST.
(L) VORW/DME 112.0 RST Chan 57 N43°46.97′ W92°35.82′ 024° 8.6 NM to fld. 1389/5E. **HIWAS.**
ILS 108.5 I–RST Rwy 31
COPTER ILS 108.5 I–RST Rwy 31. Class IT.
ILS 109.1 I–MNK Rwy 13. Class IC. LOC unusable byd 25° left and right of centerline.
ASR (1100–0500Z‡)

ROSEAU MUNI/RUDY BILLBERG FLD (ROX) 3 E UTC−6(−5DT) N48°51.36′ W95°41.83′ **TWIN CITIES**
1060 B S4 **FUEL** 100LL, JET A NOTAM FILE ROX **L–14H**
RWY 16–34: H4401X75 (ASPH) S–30, D–40 MIRL 0.3% up S **IAP**
RWY 16: REIL. VASI(V2L)—GA 3.0° TCH 26′.
RWY 34: REIL. VASI(V2L)—GA 3.0° TCH 25′. Trees.
RWY 06–24: 2505X250 (TURF)
RWY 06: Trees.



AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Fuel avbl 24 hrs with credit card. Rwy 06–24 CLOSED winter months. Rwy 06–24 marked with yellow cones. Rwy 16 VASI OTS indef. ACTIVATE REIL Rwy 16, Rwy 34, VASI Rwy 16, Rwy 34, MIRL Rwy 16–34 preset low ints, to increase ints—CTAF.
WEATHER DATA SOURCES: AWOS–3 108.8 ROX (218) 463–1803.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.25 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 134.75
RADIO AIDS TO NAVIGATION: NOTAM FILE ROX.
(L) VORW/DME 108.8 ROX Chan 25 N48°51.28′ W95°41.70′ at fld. 1055/5E. AWOS–3

LOC I-RST	APP CRS	Rwy Idg	9033
108.5	311°	TDZE	1304
		Apt Elev	1317

COPTER ILS or LOC RWY 31

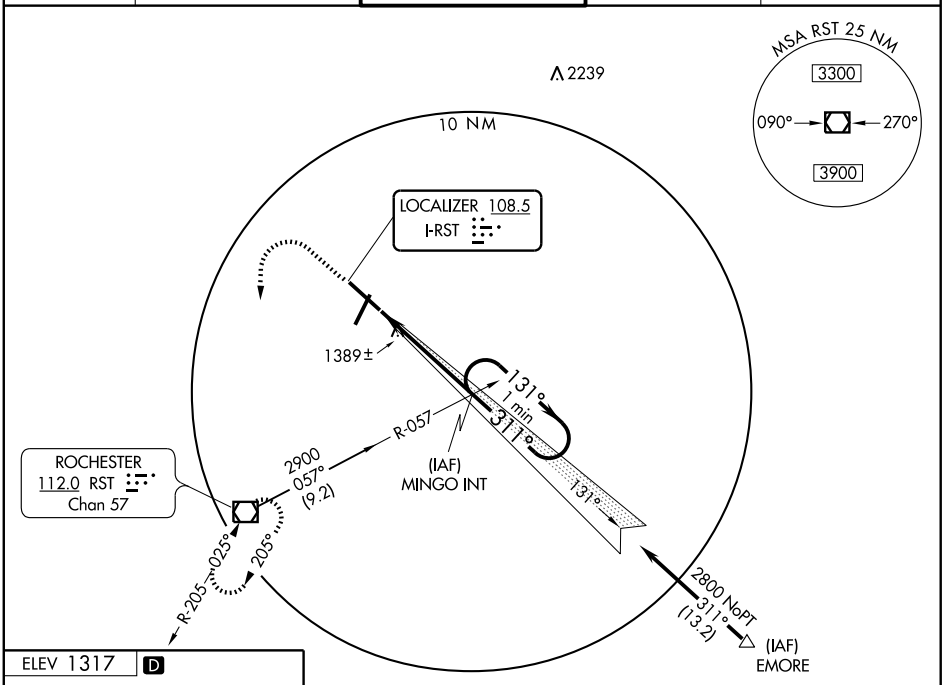
ROCHESTER INTL (RST)

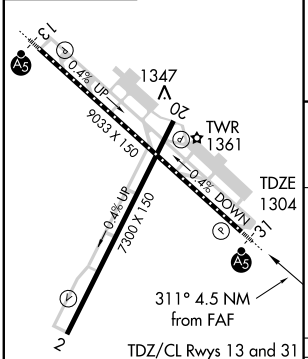
T A ASR — For inoperative MALSR, increase visibility to RVR 2400.

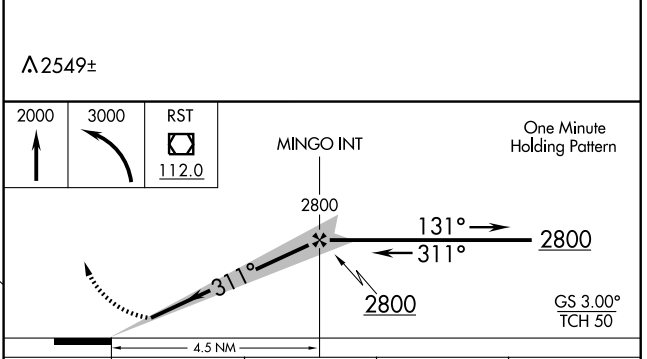
MALSR

MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct RST VOR/DME and hold.

ATIS	ROCHESTER APP CON★	ROCHESTER TOWER★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95







FAF to MAP 4.5 NM					
Knots	45	60	75	90	105
Min:Sec	6:00	4:30	3:36	3:00	2:34

CATEGORY	COPTER	B	C	D
S-ILS 31	1504/16 200 (200-¼)	NA		
S-LOC 31	1660/16 356 (400-¼)	NA		
CIRCLING	NA			

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC I-MNK	APP CRS	Rwy Idg	9033
109.1	131°	TDZE	1280
		Apt Elev	1317

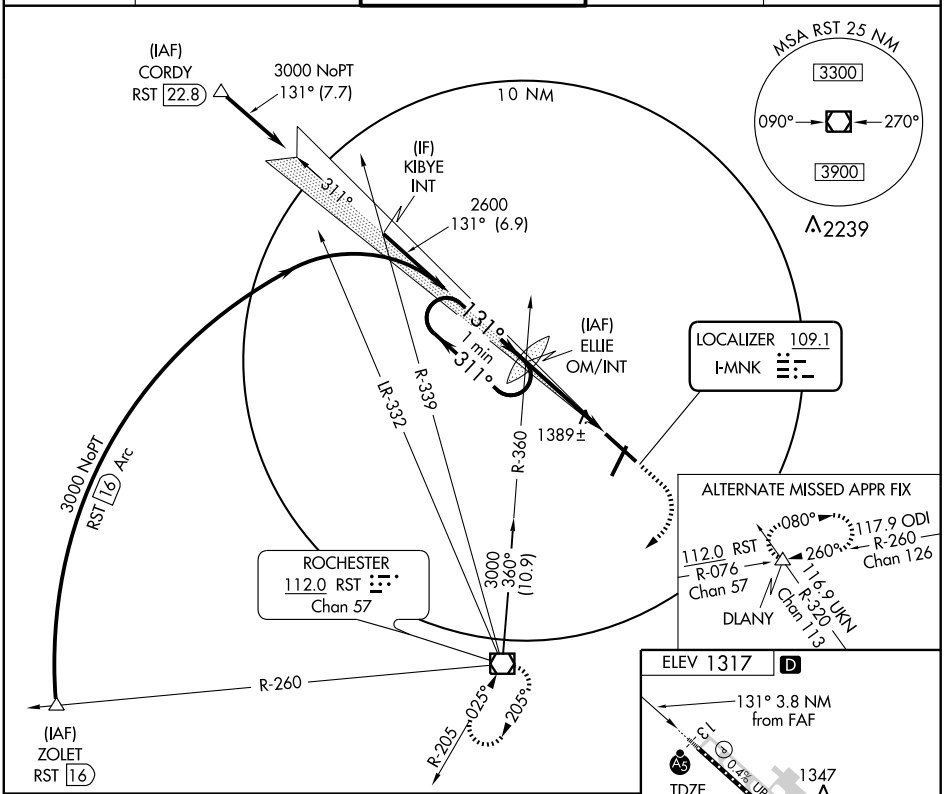
ILS or LOC RWY 13
ROCHESTER INTL (RST)

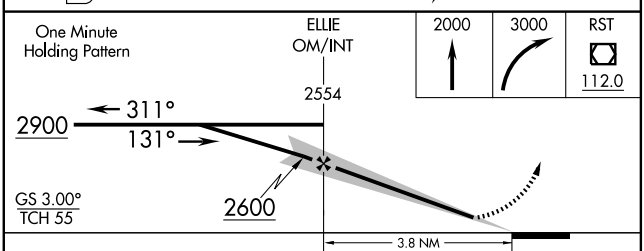
T A ASR

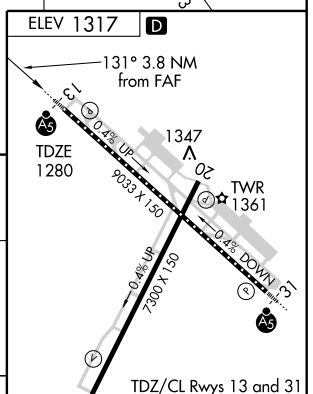
MALSR

MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 direct RST VOR/DME and hold.

ATIS	ROCHESTER APP CON★	ROCHESTER TOWER★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
S-ILS 13	1480/18 200 (200-½)			
S-LOC 13	1640/24 360 (400-½)			1640/40 360 (400-¾)
CIRCLING	1720-1 403 (500-1)	1780-1 463 (500-1)	1780-1½ 463 (500-1½)	1880-2 563 (600-2)

FAF to MAP 3.8 NM

Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC I-RST	APP CRS	Rwy Idg	9033
108.5	311°	TDZE	1304
		Apt Elev	1317

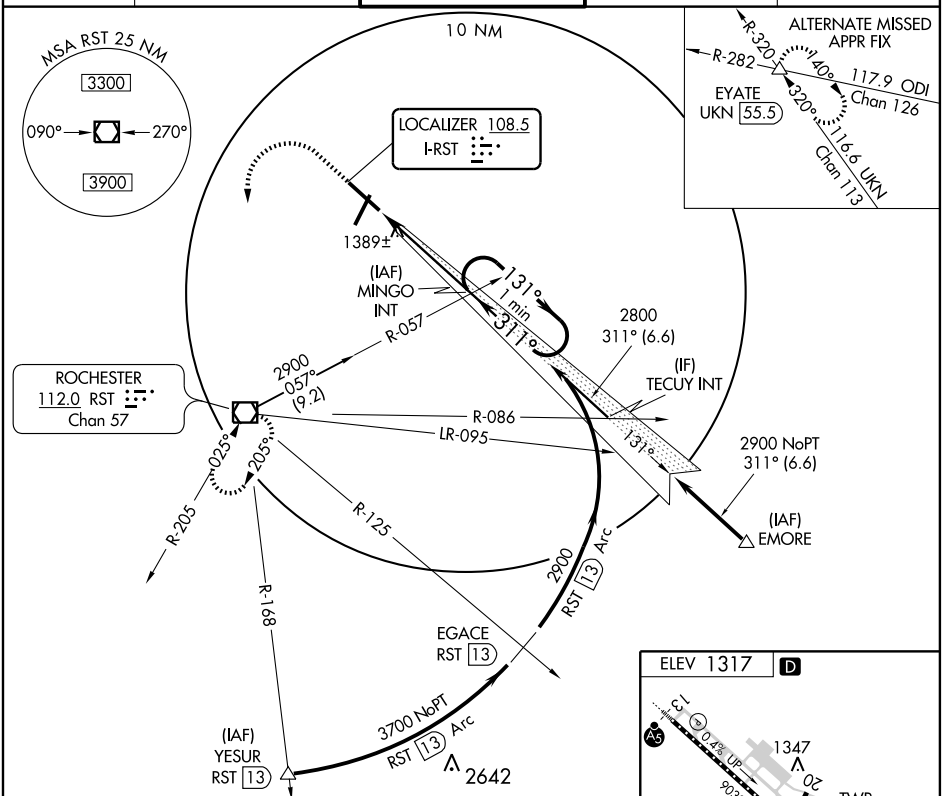
ILS or LOC RWY 31
ROCHESTER INTL (RST)

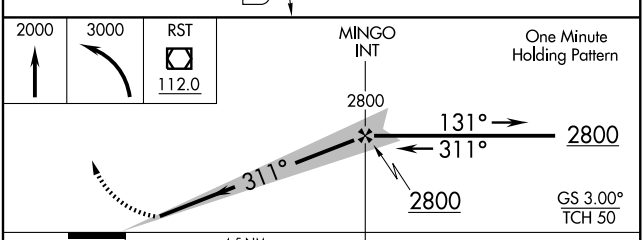
T A ASR Autopilot coupled approach not authorized below 1542 MSL.

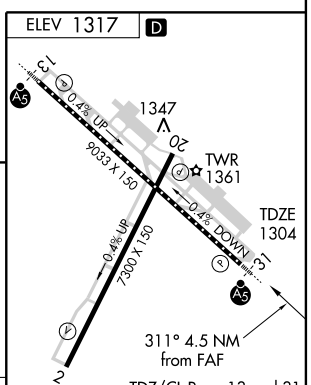
MALSR

MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct RST VOR/DME and hold.

ATIS	ROCHESTER APP CON ★	ROCHESTER TOWER ★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95







CATEGORY	A	B	C	D
S-ILS 31	1504/18 200 (200-½)			
S-LOC 31	1660/24 356 (400-½)			1660/40 356 (400-¾)
CIRCLING	1720-1 403 (500-1)	1780-1 463 (500-1)	1780-1½ 463 (500-1½)	1880-2 563 (600-2)

TDZ/CL Rwys 13 and 31
HIRL Rwy 13-31 L
MIRL Rwy 2-20 L
REIL Rwys 2 and 20

FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

CITY/AIRPORT	LDG RWY	HOLD-SHORT POINT	MEASURED DISTANCE
DULUTH, MN			
DULUTH INTL (DLH)	09	03-21	8,950 feet
GRAND FORKS, ND			
GRAND FORKS INTL (GFK)	27R	17R-35L	3,000 feet
	35L	09L-27R	4,600 feet
MINNEAPOLIS, MN			
MINNEAPOLIS-ST PAUL INTL/			
WOLD-CHAMBERLAIN (MSP)	22	TWY K	8,550 feet
	30L	TWY A9 TWY W9	8,150 feet
ROCHESTER, MN			
ROCHESTER INTL (RST)	02	13-31	5,850 feet
	13	02-20	5,270 feet
	31	02-20	3,200 feet

21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 2

ROCHESTER INTL (RST)

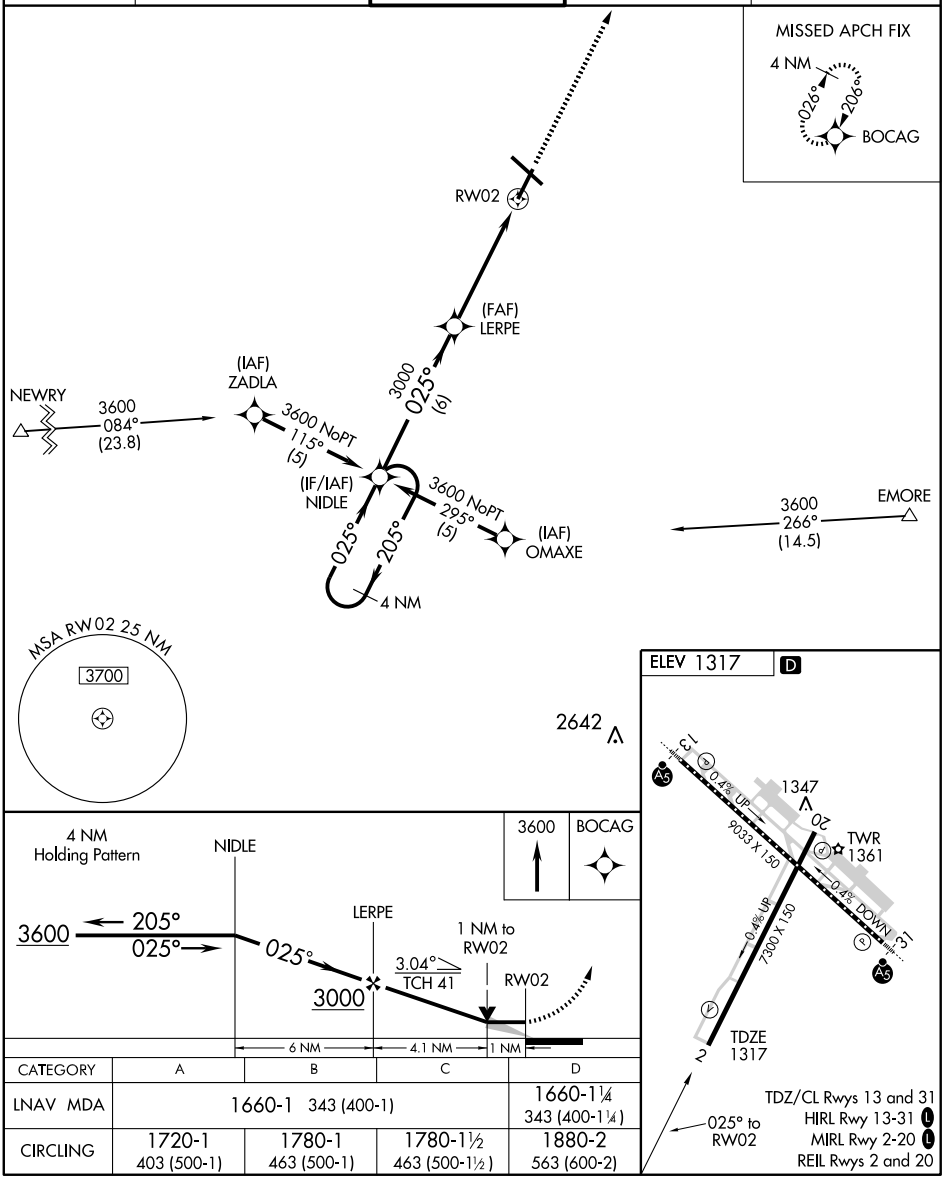
APP CRS	Rwy Idg	7300
025°	TDZE	1317
	Apt Elev	1317

T
NA
ASR

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3600 direct BOCAG WP and hold.

ATIS	ROCHESTER APP CON ★	ROCHESTER TOWER ★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95



CATEGORY	A	B	C	D
LNAV MDA	1660-1 343 (400-1)			1660-1¼ 343 (400-1¼)
CIRCLING	1720-1 403 (500-1)	1780-1 463 (500-1)	1780-1½ 463 (500-1½)	1880-2 563 (600-2)

TDZ/CL Rwys 13 and 31
HIRL Rwy 13-31 L
MIRL Rwy 2-20 L
REIL Rwys 2 and 20

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 13

ROCHESTER INTL (RST)

WAAS	APP CRS	Rwy Idg	9033
CH 90202	131°	TDZE	1280
W13A		Apt Elev	1317

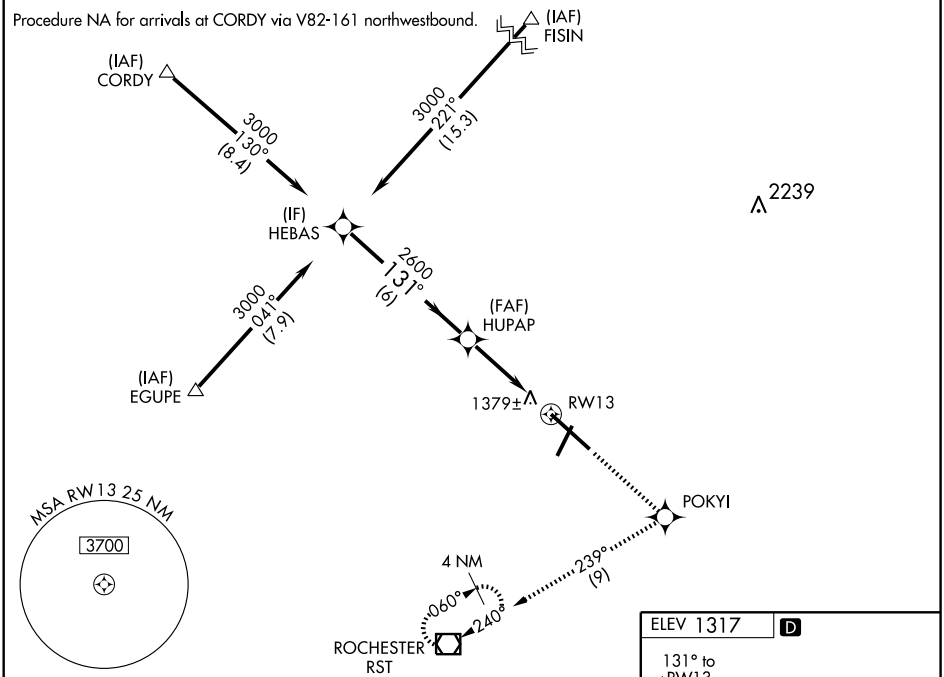
ASR

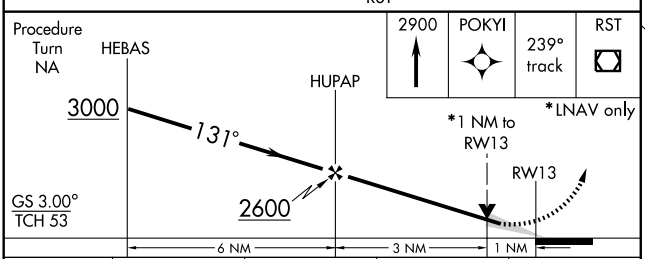
DME/DME RNP-0.3 NA.
For uncompensated Baro-VNAV system, LNAV/VNAV NA below -17°C (2°F) or above 45°C (114°F).
For inoperative MALSR increase LPV all Cats visibility to RVR 5000 and LNAV Cat D visibility to RVR 6000.

MALSR

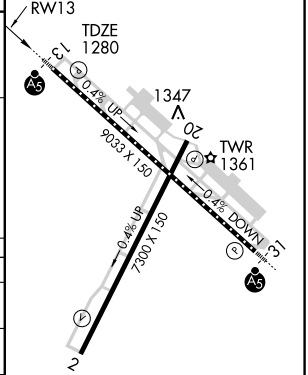
MISSED APPROACH: Climb to 2900 direct POKYI and via 239° track to RST VOR/DME and hold.

ATIS	ROCHESTER APP CON★	ROCHESTER TOWER★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95





CATEGORY	A	B	C	D
LPV DA	1530/24 250 (300-½)			
LNAV/VNAV DA	1679/50 399 (400-1)			
LNAV MDA	1640/24 360 (400-½)			1640/50 360 (400-1)
CIRCLING	1720-1½ 403 (500-1½)	1780-1½ 463 (500-1½)		1880-2 563 (600-2)



TDZ/CL Rwys 13 and 31
HIRL Rwy 13-31 L
MIRL Rwy 2-20 L
REIL Rwys 2 and 20

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 20

ROCHESTER INTL (RST)

APP CRS	Rwy Idg	7300
206°	TDZE	1304
	Apt Elev	1317

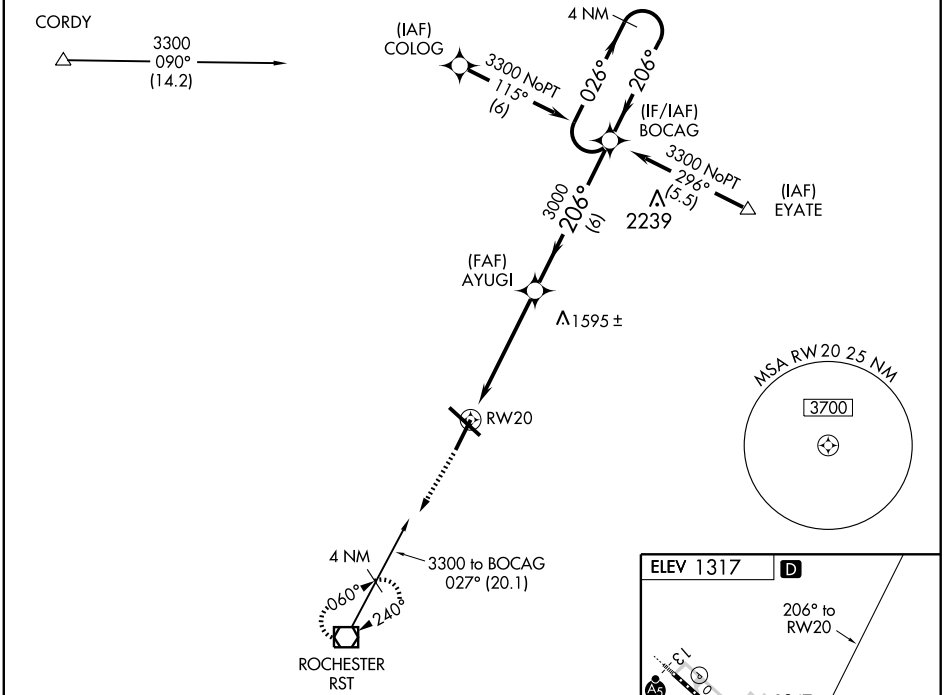
T
NA
ASR

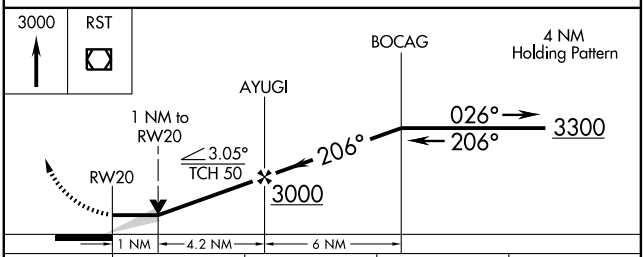
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct RST VOR/DME and hold.

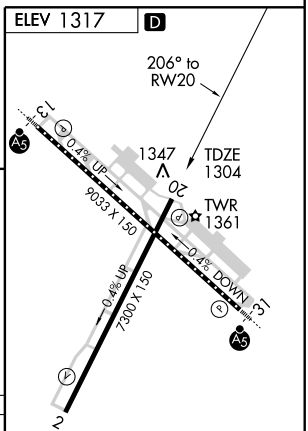
ATIS	ROCHESTER APP CON ★	ROCHESTER TOWER ★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95

Procedure NA for arrivals at EYATE via V218 southeastbound.





CATEGORY	A	B	C	D
LNAV MDA	1660-1 356 (400-1)			1660-1¼ 356 (400-1¼)
CIRCLING	1720-1 403 (500-1)	1780-1 463 (500-1)	1780-1½ 463 (500-1½)	1880-2 563 (600-2)



TDZ/CL Rwys 13 and 31
HIRL Rwy 13-31 L
MIRL Rwy 2-20 L
REIL Rwys 2 and 20

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 31

ROCHESTER INTL (RST)

APP CRS	Rwy Idg	9033
311°	TDZE	1304
	Apt Elev	1317

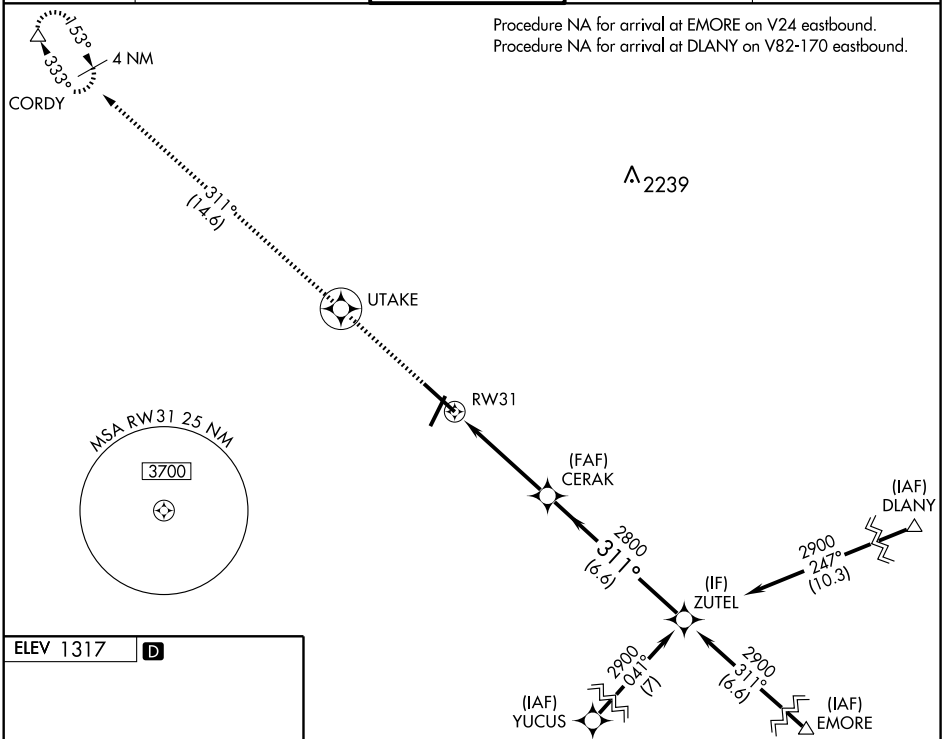
T NA ASR — Baro-VNAV NA below -17°C (2°F). GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. For inoperative MALSR increase LNAV/VNAV Cat. D visibility to RVR 5000 and increase LNAV Cat. D visibility to RVR 6000.

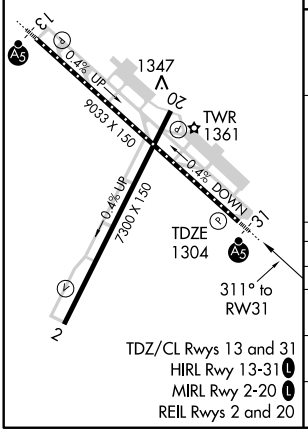
MALSR (A5)

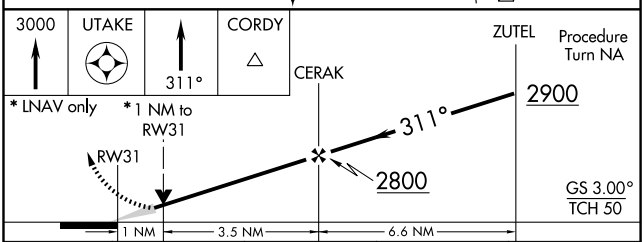
MISSED APPROACH: Climb to 3000 direct UTAKE WP and via 311° track to CORDY WP and hold.

ATIS	ROCHESTER APP CON★	ROCHESTER TOWER★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95

Procedure NA for arrival at EMORE on V24 eastbound.
Procedure NA for arrival at DLANY on V82-170 eastbound.







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV MDA	1620/24 316 (400-½)			1620/40 316 (400-¾)
LNAV MDA	1680/24 376 (400-½)			1680/50 376 (400-1)
CIRCLING	1720-1 403 (500-1)	1780-1 463 (500-1)	1780-1½ 463 (500-1½)	1880-2 563 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME RST	APP CRS	Rwy Idg	7300
112.0	204°	TDZE	1304
Chan 57		Apt Elev	1317

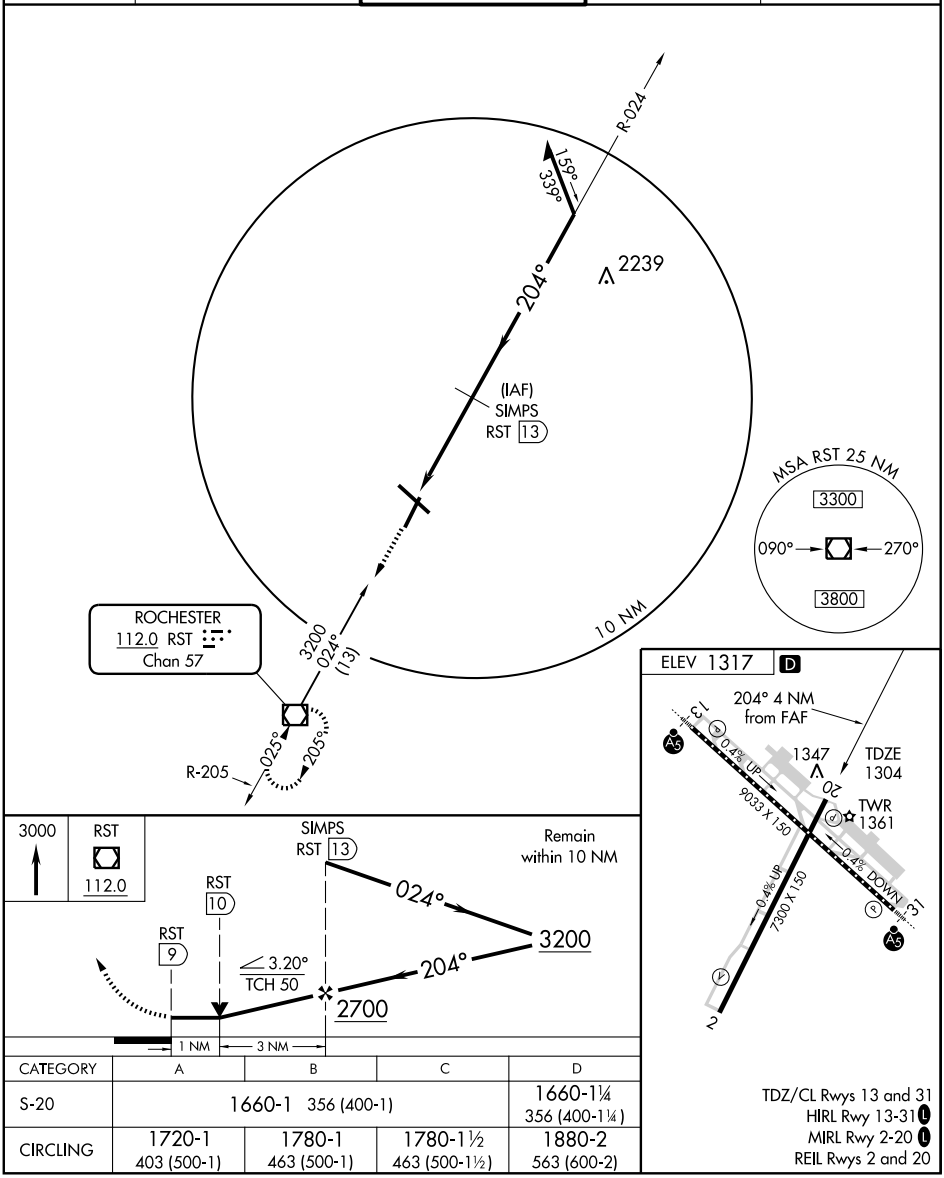
VOR/DME RWY 20

ROCHESTER INTL (RST)

T ASR

MISSED APPROACH: Climb to 3000 direct RST VOR/DME and hold.

ATIS	ROCHESTER APP CON★	ROCHESTER TOWER★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95



CATEGORY	A	B	C	D
S-20	1660-1 356 (400-1)			1660-1¼ 356 (400-1¼)
CIRCLING	1720-1 403 (500-1)	1780-1 463 (500-1)	1780-1½ 463 (500-1½)	1880-2 563 (600-2)

TDZ/CL Rwys 13 and 31
HIRL Rwy 13-31 L
MIRL Rwy 2-20 L
REIL Rwys 2 and 20

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

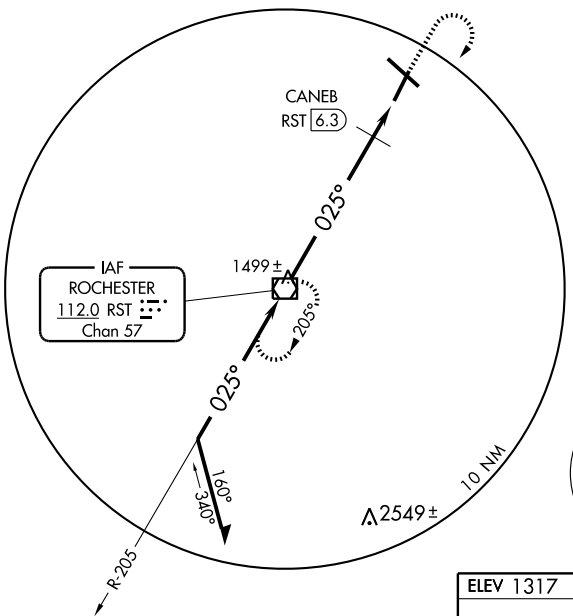
VOR/DME RST	APP CRS	Rwy Idg	7300
112.0	025°	TDZE	1317
Chan 57		Apt Elev	1317

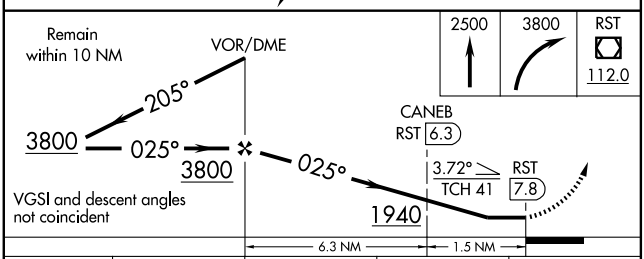
VOR RWY 2
ROCHESTER INTL (RST)

T
ASR

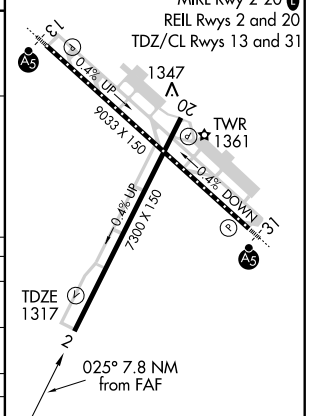
MISSED APPROACH: Climb to 2500 then climbing right turn to 3800 direct RST VOR/DME and hold.

ATIS	ROCHESTER APP CON ★	ROCHESTER TOWER ★	GND CON	UNICOM
120.5	119.8 251.125	118.3 (CTAF) L 257.8	121.9	122.95





CATEGORY	A	B	C	D
S-2	1940-1 623 (700-1)		1940-1¾ 623 (700-1¾)	1940-2 623 (700-2)
CIRCLING	1940-1 623 (700-1)		1940-1¾ 623 (700-1¾)	1940-2 623 (700-2)
DME MINIMUMS				
S-2	1680-1 363 (400-1)			NA
CIRCLING	1720-1 403 (500-1)	1780-1 463 (500-1)	1780-1½ 463 (500-1½)	1880-2 563 (600-2)

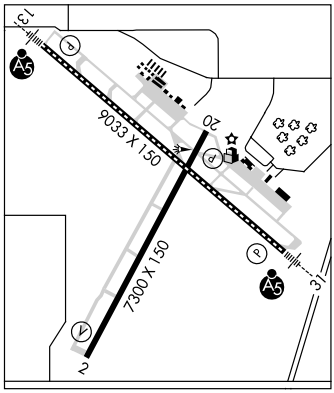


FAF to MAP 7.8 NM					
Knots	60	90	120	150	180
Min:Sec	7:48	5:12	3:54	3:07	2:36

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ROCHESTER INTL (RST) 7 SW UTC−6(−5DT) N43°54.50′ W92°30.00′ **CHICAGO**
1317 B S4 **FUEL** 100LL, JET A OX 3, 4 LRA Class I, ARFF Index B **H–2J, L–12J, 28F**
NOTAM FILE RST **IAP, AD**

RWY 13–31: H9033X150 (CONC) S–100, D–175, 2S–175, 2D–300 HIRL CL
RWY 13: MALSR. TDZL. PAPI(P4L)—GA 3.0° TCH 53′. 0.4% up.
RWY 31: MALSR. TDZL. PAPI(P4L)—GA 3.0° TCH 51′. 0.4% down.
RWY 02–20: H7300X150 (CONC–WC) S–100, D–175, 2S–175, 2D–300 MIRL 0.4% up SW
RWY 02: REIL. VASI(V4L)—GA 3.0° TCH 47′.
RWY 20: REIL. PAPI(P4L)—GA 3.05° TCH 50′.



LAND AND HOLD SHORT OPERATIONS

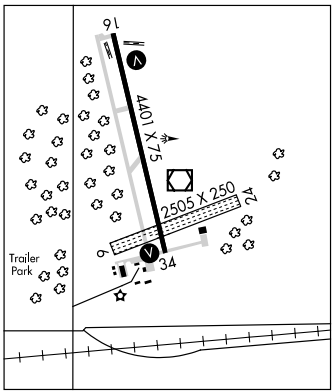
LANDING	HOLD SHORT POINT	DIST AVBL
RWY 02	13–31	5850
RWY 13	02–20	5270
RWY 31	02–20	3200

RUNWAY DECLARED DISTANCE INFORMATION

RWY 02:	TORA–7300	TODA–7300	ASDA–7300	LDA–7300
RWY 13:	TORA–9033	TODA–9033	ASDA–9033	LDA–9033
RWY 20:	TORA–7300	TODA–7300	ASDA–7300	LDA–7300
RWY 31:	TORA–9033	TODA–9033	ASDA–9033	LDA–9033

AIRPORT REMARKS: Attended continuously. Waterfowl on and invof arpt. When twr clsd snow removal equipment operators monitor CTAF. 24 hr PPR for unscheduled air carrier ops with more than 9 passenger seats between 0500–1100Z‡, call 507–254–1161. VASI and PAPIs on continuously. When twr clsd HIRL Rwy 13–31 preset, to increase ints and ACTIVATE MIRL Rwy 02–20 and MALSR Rwy 13 and Rwy 31—CTAF. Rwy 13–31 RVR avbl during twr hrs of ops only. US Customs avbl Mon–Fri 1430–2300Z‡, after hrs and weekends require prior notification, call 507–285–5278.
WEATHER DATA SOURCES: ASOS (507) 285–0298. **HIWAS** 112.0 RST. LLWAS.
COMMUNICATIONS: CTAF 118.3 **ATIS** 120.5 **UNICOM** 122.95
RCO 122.45 (PRINCETON RADIO)
Ⓡ **APP/DEP CON** 119.2 (310°–129°) 119.8 (130°–309°) (1100–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.35 (0500–1100Z‡)
TOWER 118.3 (1100–0500Z‡) **GND CON** 121.9
AIRSPACE: CLASS D svc 1100–0500Z‡ other times CLASS E.
RADIO AIDS TO NAVIGATION: NOTAM FILE RST.
(L) VORW/DME 112.0 RST Chan 57 N43°46.97′ W92°35.82′ 024° 8.6 NM to fld. 1389/5E. **HIWAS.**
ILS 108.5 I–RST Rwy 31
COPTER ILS 108.5 I–RST Rwy 31. Class IT.
ILS 109.1 I–MNK Rwy 13. Class IC. LOC unusable byd 25° left and right of centerline.
ASR (1100–0500Z‡)

ROSEAU MUNI/RUDY BILLBERG FLD (ROX) 3 E UTC−6(−5DT) N48°51.36′ W95°41.83′ **TWIN CITIES**
1060 B S4 **FUEL** 100LL, JET A NOTAM FILE ROX **L–14H**
RWY 16–34: H4401X75 (ASPH) S–30, D–40 MIRL 0.3% up S **IAP**
RWY 16: REIL. VASI(V2L)—GA 3.0° TCH 26′.
RWY 34: REIL. VASI(V2L)—GA 3.0° TCH 25′. Trees.
RWY 06–24: 2505X250 (TURF)
RWY 06: Trees.



AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Fuel avbl 24 hrs with credit card. Rwy 06–24 CLOSED winter months. Rwy 06–24 marked with yellow cones. Rwy 16 VASI OTS indef. ACTIVATE REIL Rwy 16, Rwy 34, VASI Rwy 16, Rwy 34, MIRL Rwy 16–34 preset low ints, to increase ints—CTAF.
WEATHER DATA SOURCES: AWOS–3 108.8 ROX (218) 463–1803.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.25 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 134.75
RADIO AIDS TO NAVIGATION: NOTAM FILE ROX.
(L) VORW/DME 108.8 ROX Chan 25 N48°51.28′ W95°41.70′ at fld. 1055/5E. AWOS–3

WAAS	APP CRS	Rwy Idg	4401
CH 56304	162°	TDZE	1055
W16A		Apt Elev	1060

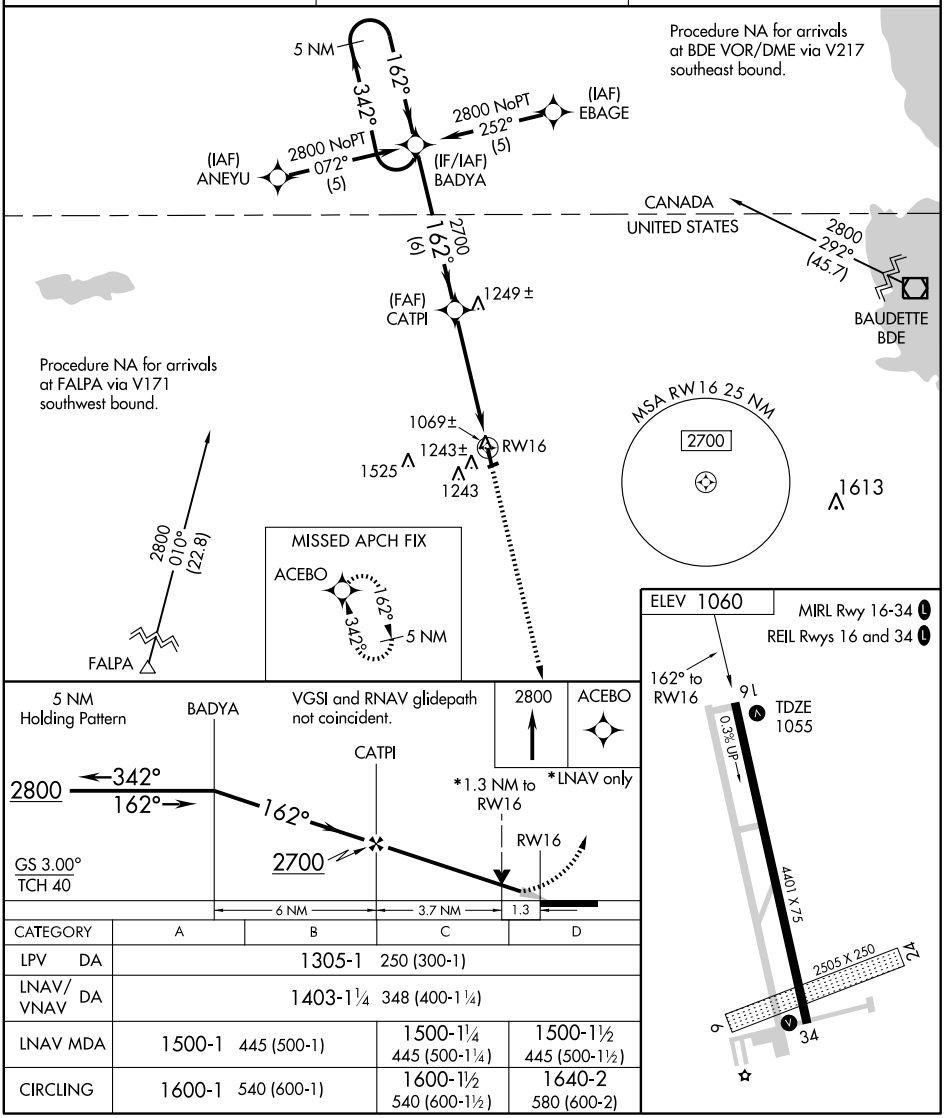
RNAV (GPS) RWY 16

ROSEAU MUNI/RUDY BILLBERG FIELD (ROX)

If local altimeter setting not received, use Warroad altimeter setting and increase all DAs 36 feet/MDAs 40 feet.
VDP NA when using Warroad altimeter setting.
Baro-VNAV NA when using Warroad altimeter setting.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 2800 direct ACEBO and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.8	134.75 251.1	122.8 (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1305-1 250 (300-1)			
LNAV/VNAV DA	1403-1¼ 348 (400-1¼)			
LNAV MDA	1500-1 445 (500-1)		1500-1¼ 445 (500-1¼)	1500-1½ 445 (500-1½)
CIRCLING	1600-1 540 (600-1)		1600-1½ 540 (600-1½)	1640-2 580 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	4401
CH 99404	342°	TDZE	1060
W34A		Apt Elev	1060

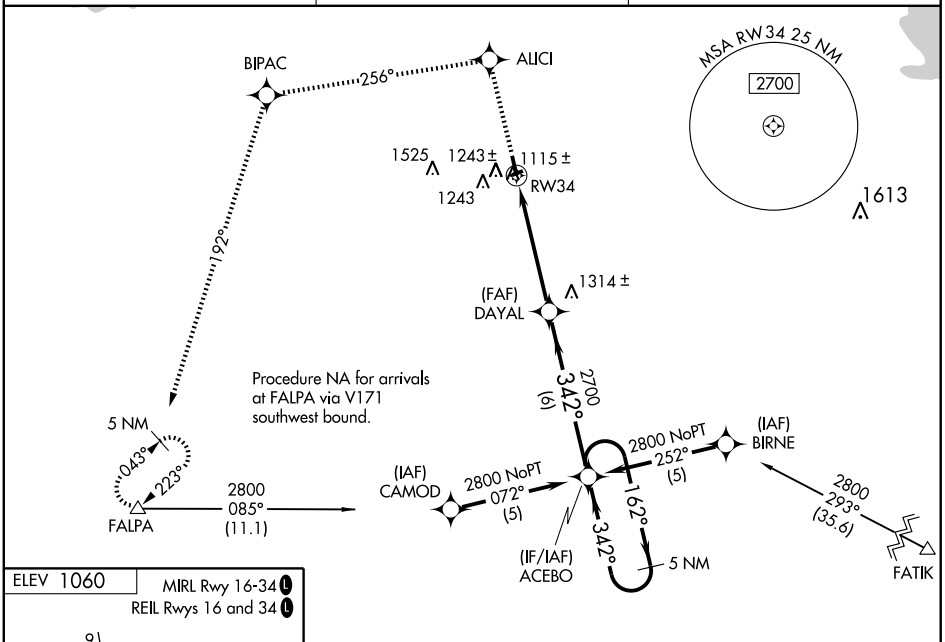
RNAV (GPS) RWY 34

ROSEAU MUNI/RUDY BILLBERG FIELD (ROX)

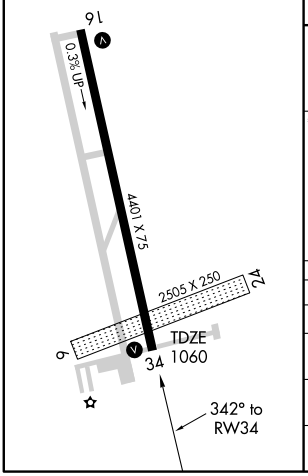
If local altimeter setting not received, use Warroad altimeter setting and increase all DAs 36 feet/MDAs 40 feet.
V VDP NA when using Warroad altimeter setting.
A Baro-VNAV NA when using Warroad altimeter setting.
W For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F).
Visibility reduction by helicopters NA. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 2900 direct ALICI and via 256° track to BIPAC and 192° track to FALPA and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.8	134.75 251.1	122.8 (CTAF) L



ELEV 1060
MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L



2900	ALICI	256° track	BIPAC	192° track	FALPA

5 NM Holding Pattern
ACEBO
*LNAV only
DAYAL
*1.5 NM to RW34
RW34
162°
342°
2800
342°
2700
GS 3.00°
TCH 40
VGSI and RNAV glidepath not coincident.
1.5 3.5 NM 6 NM

CATEGORY	A	B	C	D
LPV DA	1310-1 250 (300-1)			
LNAV/VNAV DA	1485-1½ 425 (500-1½)			
LNAV MDA	1560-1 500 (500-1)		1560-1¼ 500 (500-1¼)	1560-1½ 500 (500-1½)
CIRCLING	1600-1 540 (600-1)		1600-1½ 540 (600-1½)	1640-2 580 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME ROX	APP CRS	Rwy Idg	4401
108.8	156°	TDZE	1055
Chan 25		Apt Elev	1060

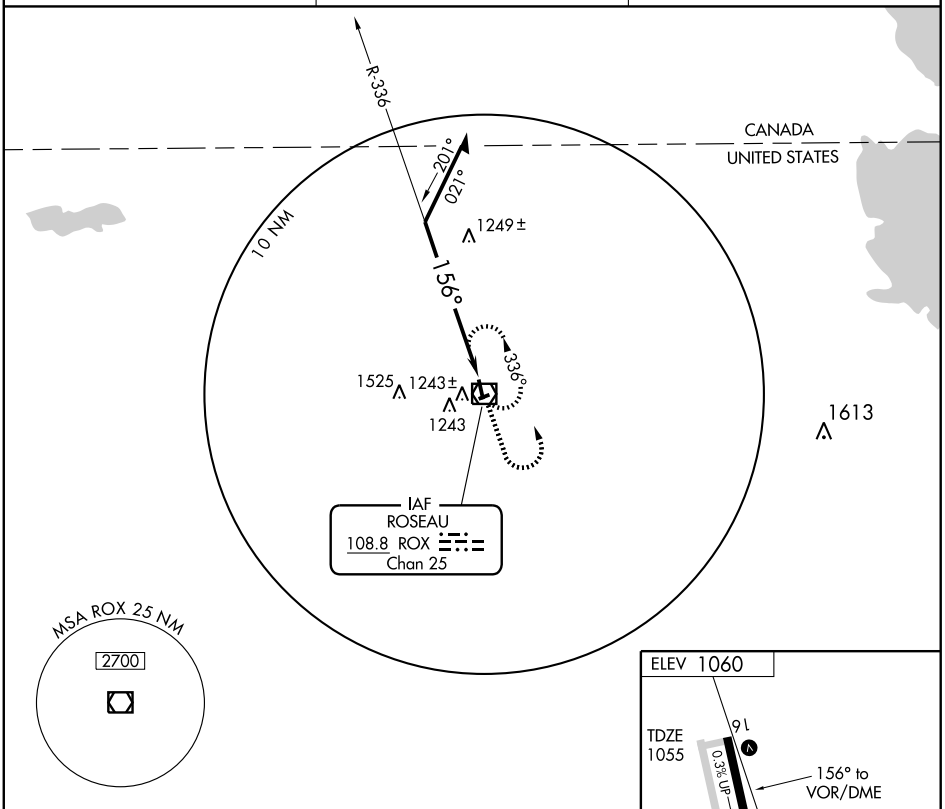
VOR RWY 16

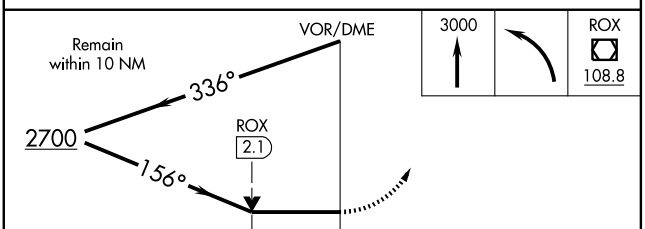
ROSEAU MUNI/RUDY BILLBERG FIELD (ROX)

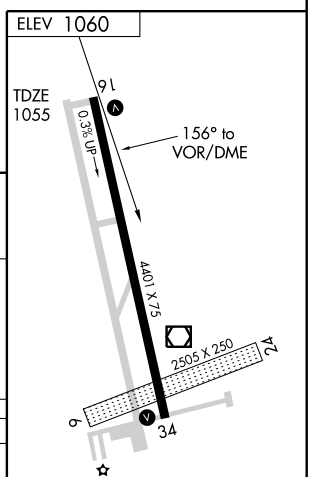
If local altimeter setting not received, use Warroad altimeter setting and increase all MDAs 40 feet.
VDP NA when using Warroad altimeter setting.

MISSED APPROACH: Climb to 3000 then left turn direct ROX VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.8	134.75 251.1	122.8 (CTAF) L







MIRL Rwy 16-34 L
REIL Rwys 16 and 34 L

CATEGORY	A	B	C	D
S-16	1560-1 505 (500-1)		1560-1½ 505 (500-1½)	
CIRCLING	1600-1 540 (600-1)		1600-1½ 540 (600-1½)	1640-2 580 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME ROX	APP CRS	Rwy Idg	4401
108.8	349°	TDZE	1060
Chan 25		Apt Elev	1060

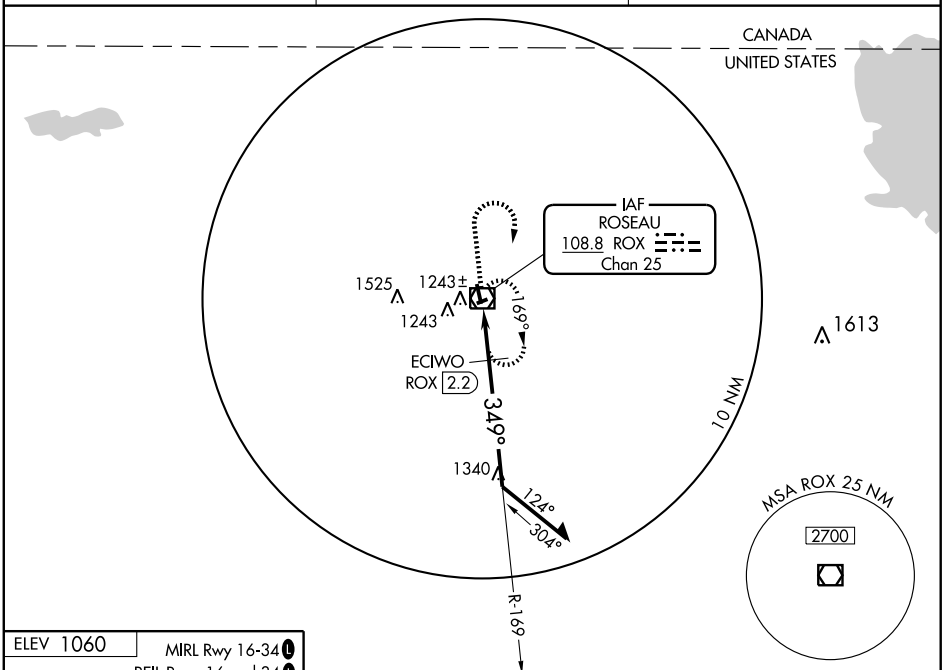
VOR RWY 34

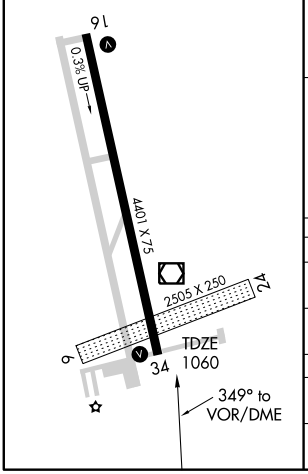
ROSEAU MUNI/RUDY BILLBERG FIELD (ROX)

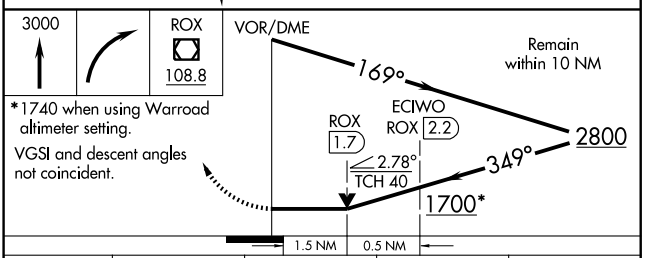
If local altimeter setting not received, use Warroad altimeter setting and increase all MDAs 40 feet.
NA VDP NA when using Warroad altimeter setting.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 then right turn direct ROX VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.8	134.75 251.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-34	1700-1	640 (700-1)	1700-1¾ 640 (700-1¾)	1700-2 640 (700-2)
CIRCLING	1700-1	640 (700-1)	1700-1¾ 640 (700-1¾)	1700-2 640 (700-2)
ECIWO FIX MINIMUMS				
S-34	1560-1	500 (500-1)	1560-1¼ 500 (500-1¼)	1560-1½ 500 (500-1½)
CIRCLING	1600-1	540 (600-1)	1600-1½ 540 (600-1½)	1640-2 580 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RUSH CITY RGNL (ROS) 1 NE UTC−6(−5DT) N45°41.83′ W92°57.13′

GREEN BAY
L–14I
IAP

926 B S2 **FUEL** 100LL, JET A NOTAM FILE ROS

RWY 16–34: H4400X75 (ASPH) MIRL

RWY 16: REIL. PAPI(P4L). Tree.

RWY 34: REIL. PAPI(P4L). Tree.

AIRPORT REMARKS: Attended Mon–Fri 1300–2130Z‡, Sat 1500–2130Z‡. Self service fuel avbl with credit card. Trees +20′ within 100′ of centerline on E side of Rwy 16–34. ACTIVATE MIRL Rwy 16–34, PAPI Rwy 16 and Rwy 34 and REIL Rwy 16 and Rwy 34—CTAF.

WEATHER DATA SOURCES: AWOS–3 282 ROS (320)358–3339.

COMMUNICATIONS: CTAF 122.9

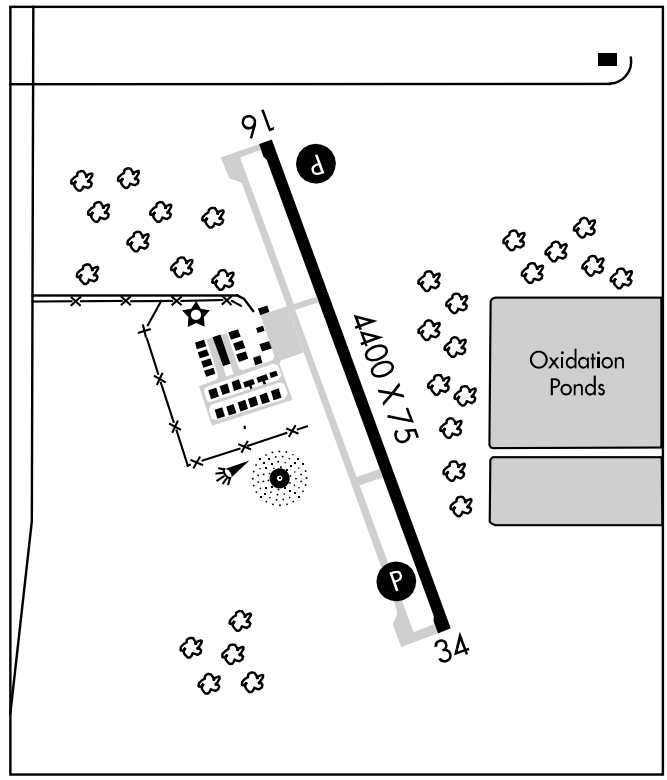
MINNEAPOLIS CENTER APP/DEP CON 121.05

GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

GOPHER (H) VORTACW 117.3 GEP Chan 120 N45°08.74′ W93°22.39′ 022° 37.6 NM to fld. 877/6E. **HIWAS.**

NDB (MHW) 282 ROS N45°41.81′ W 92°57.35′ at fld. **AWOS–3.** NOTAM FILE ROS.



RUSHFORD MUNI (55Y) 3 W UTC−6(−5DT) N43°48.95′ W91°49.81′

CHICAGO
L–28F
IAP

1211 B **FUEL** 100LL TPA—2211(1000) NOTAM FILE PNM

RWY 16–34: H3200X60 (ASPH) MIRL 0.9% up NW

RWY 16: VASI(V2L). Trees. **RWY 34:** VASI(V2L). Trees.

AIRPORT REMARKS: Attended Mon–Fri 1500–2300Z‡. For attendant call 507–454–2705. Self service fuel avbl with credit card. Deer on and invof arpt. ACTIVATE MIRL Rwy 16–34 and VASI Rwy 16 and Rwy 34—CTAF.

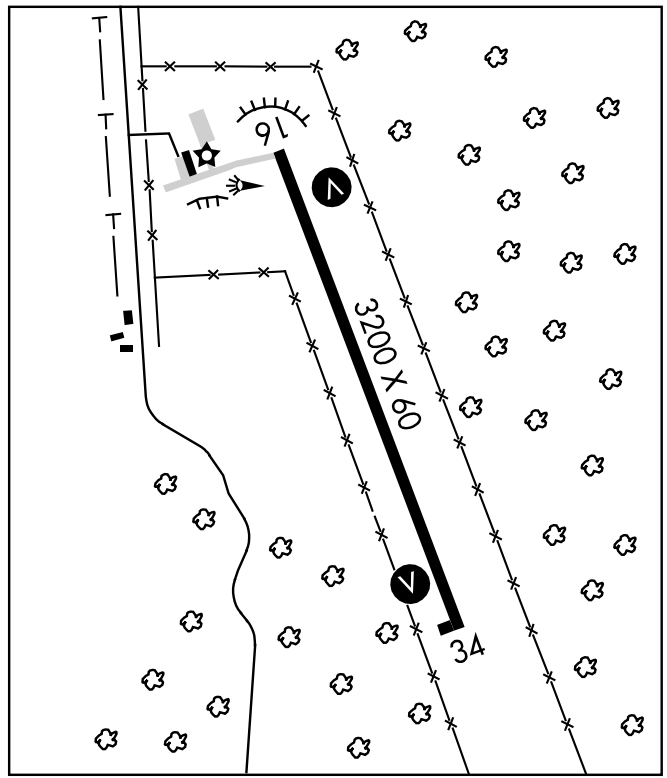
COMMUNICATIONS: CTAF 122.9

Ⓡ **ROCHESTER APP/DEP CON** 119.8 (1100–0500Z‡)

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.35 (0500Z‡–1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

NODINE (H) VORTAC 117.9 ODI Chan 126 N43°54.74′ W91°28.05′ 249° 16.8 NM to fld. 1282/1E.



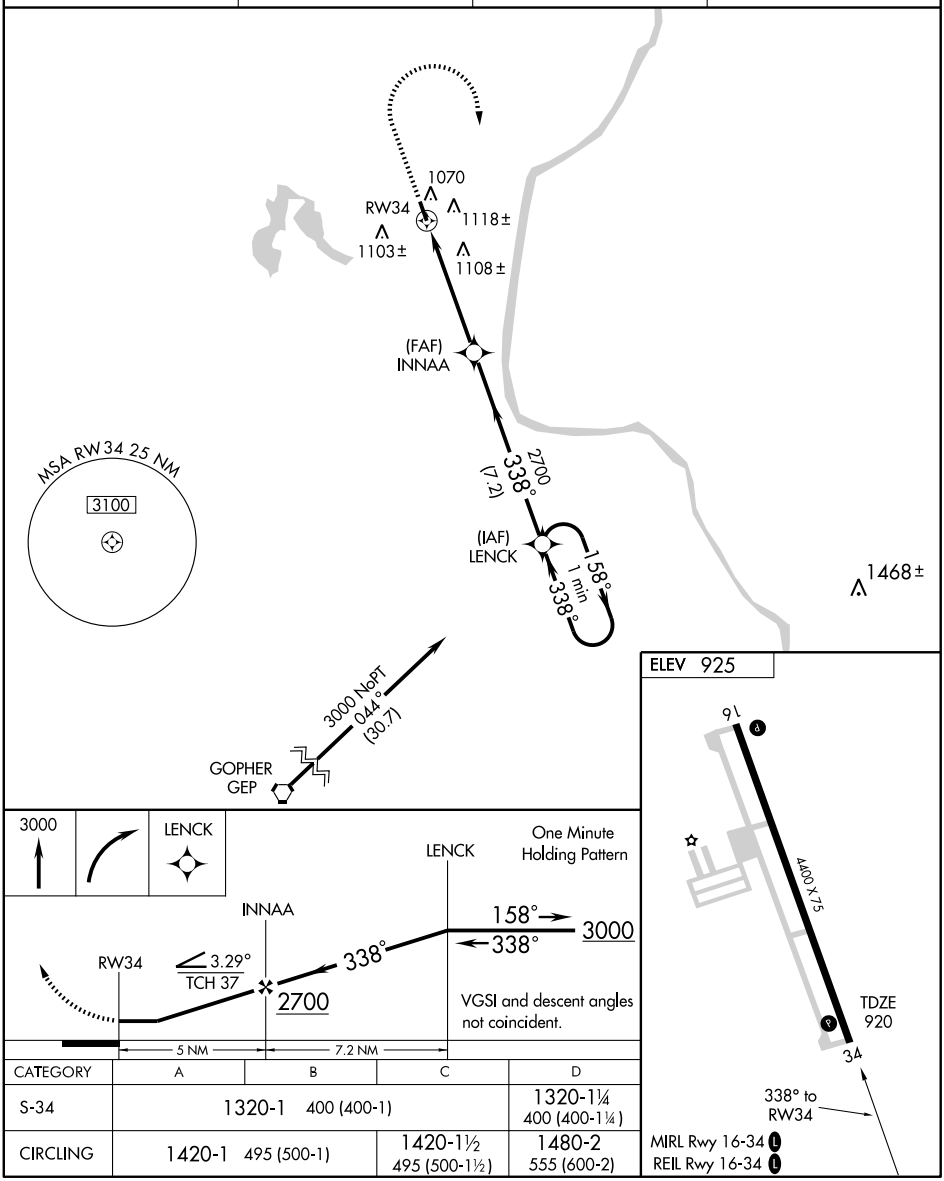
APP CRS	Rwy Idg	4400
338°	TDZE	920
	Apt Elev	925

GPS RWY 34
RUSH CITY RGNL (ROS)

NA

MISSED APPROACH: Climb to 3000, then right turn direct LENCK WP and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
282	121.05 397.9	121.725	122.9 L



CATEGORY	A	B	C	D
S-34	1320-1 400 (400-1)			1320-1¼ 400 (400-1¼)
CIRCLING	1420-1 495 (500-1)		1420-1½ 495 (500-1½)	1480-2 555 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

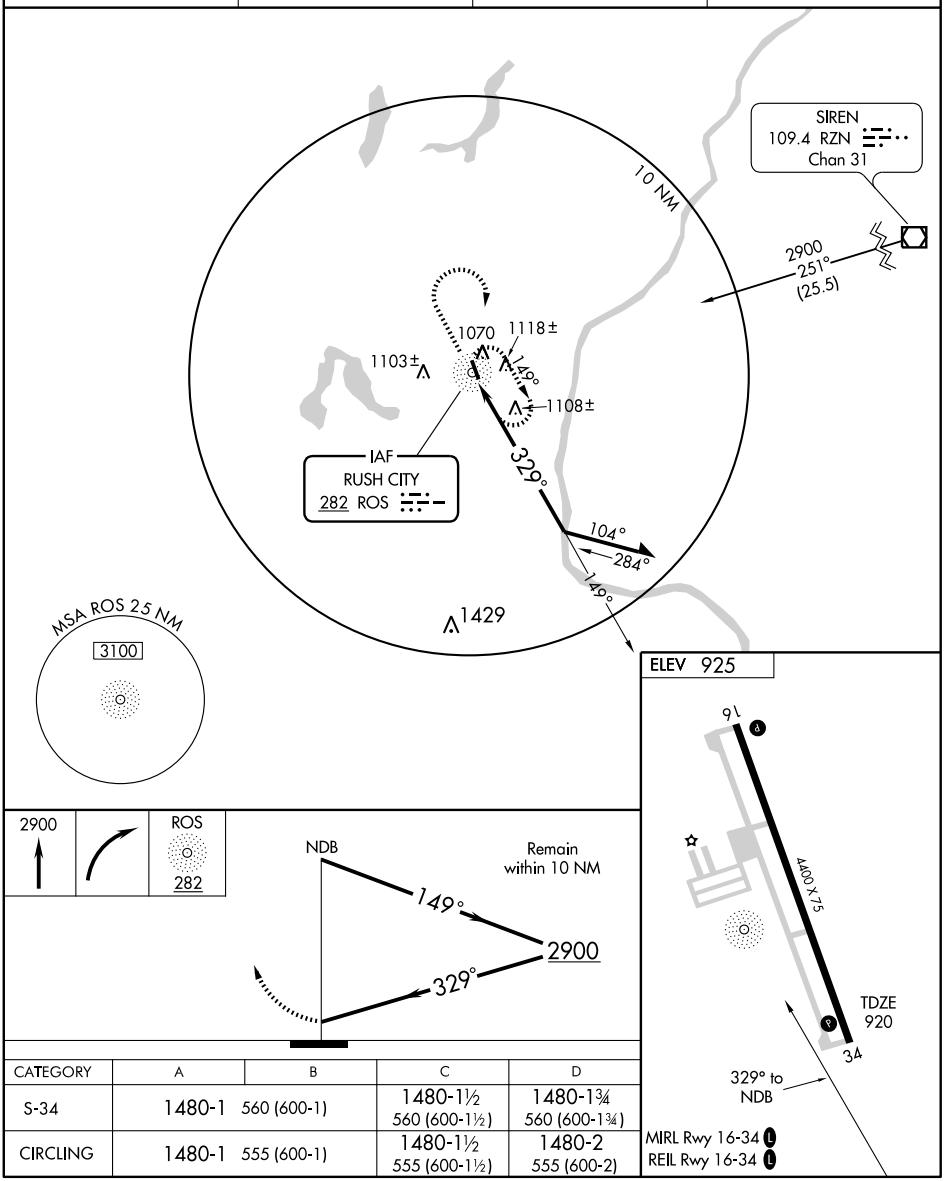
NDB ROS	APP CRS	Rwy Idg	4400
282	329°	TDZE	920
		Apt Elev	925

NDB RWY 34
RUSH CITY RGNL (ROS)

NA

MISSED APPROACH: Climb to 2900, then right turn direct ROS NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
282	121.05 397.9	121.725	122.9 L



CATEGORY	A	B	C	D
S-34	1480-1	560 (600-1)	1480-1½ 560 (600-1½)	1480-1¾ 560 (600-1¾)
CIRCLING	1480-1	555 (600-1)	1480-1½ 555 (600-1½)	1480-2 555 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RUSH CITY RGNL (ROS) 1 NE UTC−6(−5DT) N45°41.83′ W92°57.13′

GREEN BAY
L–14I
IAP

926 B S2 **FUEL** 100LL, JET A NOTAM FILE ROS

RWY 16–34: H4400X75 (ASPH) MIRL

RWY 16: REIL. PAPI(P4L). Tree.

RWY 34: REIL. PAPI(P4L). Tree.

AIRPORT REMARKS: Attended Mon–Fri 1300–2130Z‡, Sat 1500–2130Z‡. Self service fuel avbl with credit card. Trees +20′ within 100′ of centerline on E side of Rwy 16–34. ACTIVATE MIRL Rwy 16–34, PAPI Rwy 16 and Rwy 34 and REIL Rwy 16 and Rwy 34—CTAF.

WEATHER DATA SOURCES: AWOS–3 282 ROS (320)358–3339.

COMMUNICATIONS: CTAF 122.9

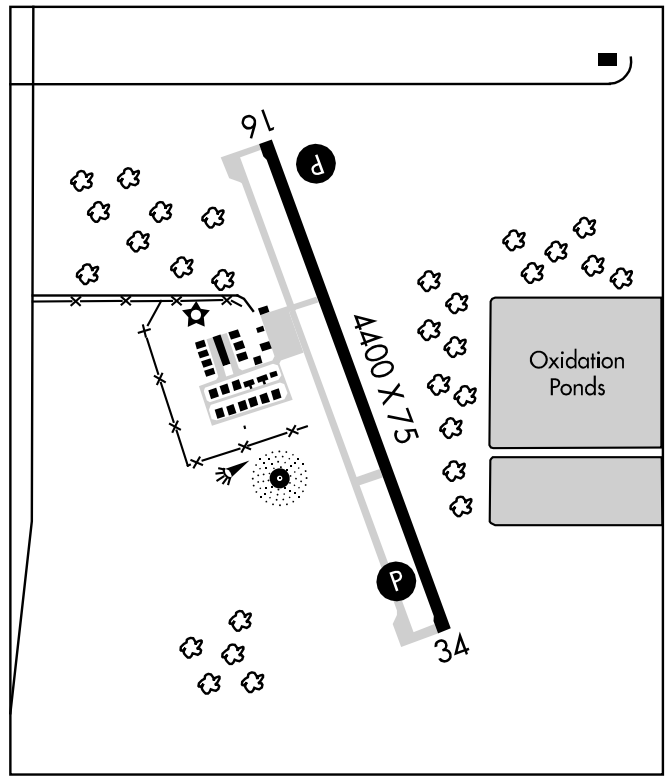
MINNEAPOLIS CENTER APP/DEP CON 121.05

GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

GOPHER (H) VORTACW 117.3 GEP Chan 120 N45°08.74′ W93°22.39′ 022° 37.6 NM to fld. 877/6E. **HIWAS.**

NDB (MHW) 282 ROS N45°41.81′ W 92°57.35′ at fld. **AWOS–3.** NOTAM FILE ROS.



RUSHFORD MUNI (55Y) 3 W UTC−6(−5DT) N43°48.95′ W91°49.81′

CHICAGO
L–28F
IAP

1211 B **FUEL** 100LL TPA—2211(1000) NOTAM FILE PNM

RWY 16–34: H3200X60 (ASPH) MIRL 0.9% up NW

RWY 16: VASI(V2L). Trees. **RWY 34:** VASI(V2L). Trees.

AIRPORT REMARKS: Attended Mon–Fri 1500–2300Z‡. For attendant call 507–454–2705. Self service fuel avbl with credit card. Deer on and invof arpt. ACTIVATE MIRL Rwy 16–34 and VASI Rwy 16 and Rwy 34—CTAF.

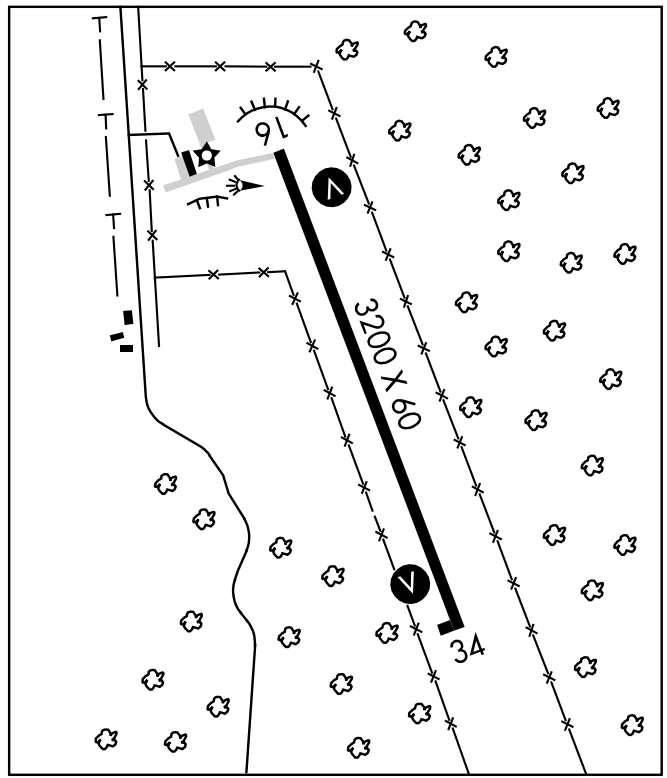
COMMUNICATIONS: CTAF 122.9

Ⓡ **ROCHESTER APP/DEP CON** 119.8 (1100–0500Z‡)

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.35 (0500Z‡–1100Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

NODINE (H) VORTAC 117.9 ODI Chan 126 N43°54.74′ W91°28.05′ 249° 16.8 NM to fld. 1282/1E.



RNAV (GPS) RWY 34

RUSHFORD MUNI (55Y)

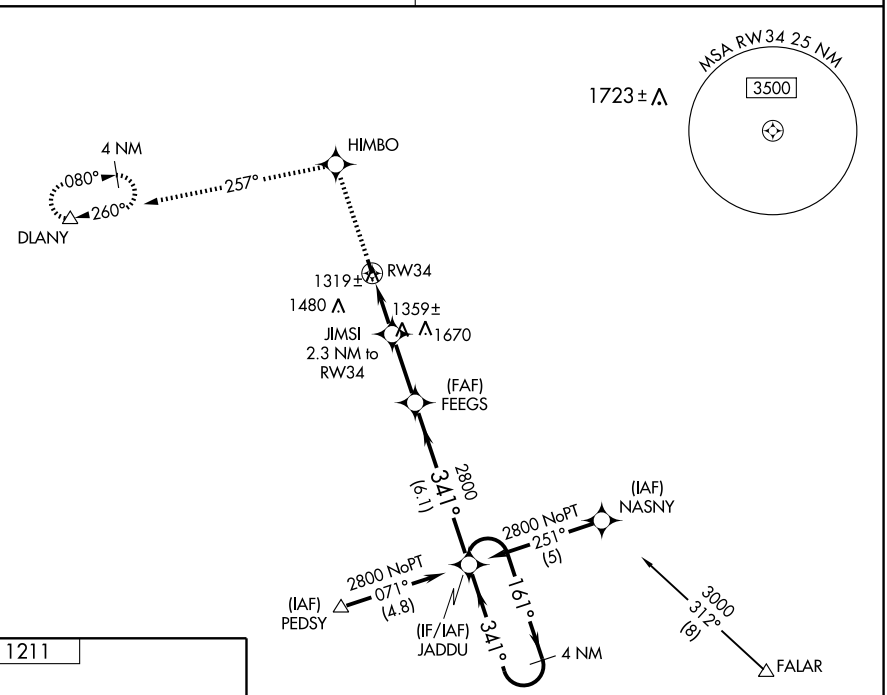
APP CRS	Rwy Idg	3200
341°	TDZE	1209
	Apt Elev	1211

DME/DME RNP-0.3 NA
NA Visibility reduction by helicopters NA.
Use Preston altimeter setting, when not received use Winona altimeter setting and increase all MDA 80 feet.

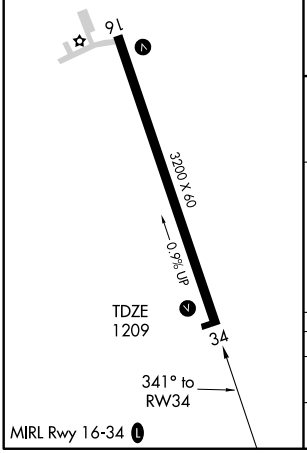
MISSED APPROACH: Climb to 3000 direct HIMBO and via 257° track to DLANY and hold.

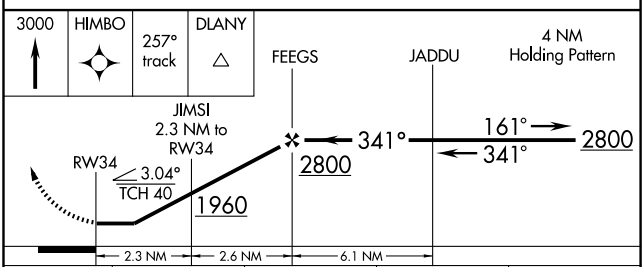
ROCHESTER APP CON * 119.8 251.125

CTAF 122.9 L



Procedure NA for arrivals at FALAR via V24 eastbound and V246 southbound.





CATEGORY	A	B	C	D
LNAV MDA	1620-1	411 (500-1)	1620-1¼ 411 (500-1¼)	NA
CIRCLING	1720-1	509 (600-1)	1720-1½ 509 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VORTAC ODI 117.9 Chan 126	APP CRS 249°	Rwy Idg N/A TDZE N/A Apt Elev 1211

VOR/DME-A

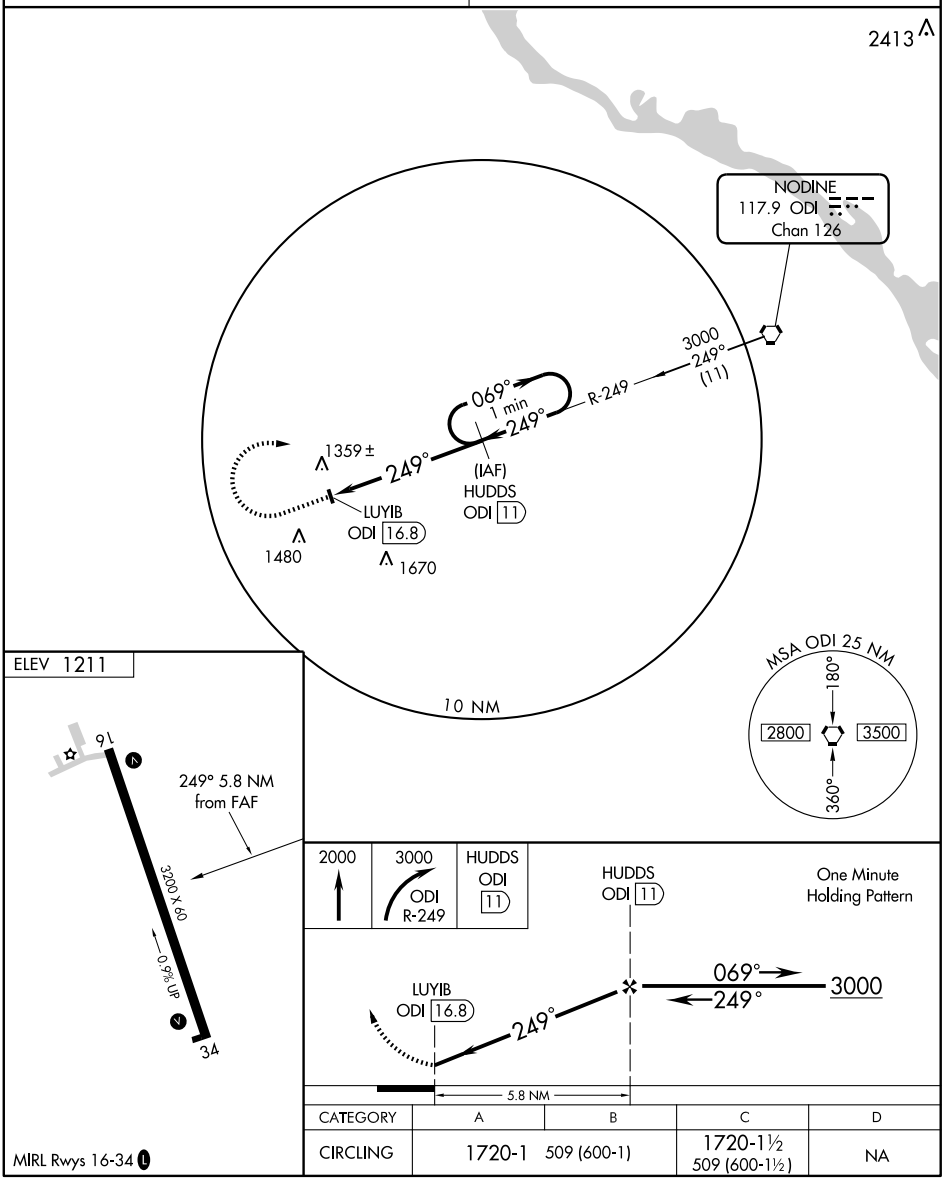
RUSHFORD MUNI (55Y)

Use Preston altimeter setting, when not received use Winona altimeter setting and increase all MDA 80 feet.

MISSED APPROACH: Climb to 2000, then climbing right turn to 3000 via ODI VORTAC R-249 to HUDDS/ODI 11 DME and hold.

ROCHESTER APP CON ★	CTAF
119.8 251.125	122.9 L

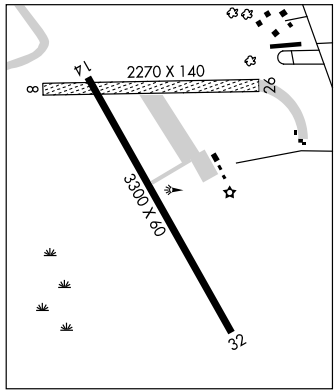
NC-1, 21 OCT 2010 to 18 NOV 2010



CATEGORY	A	B	C	D
CIRCLING	1720-1	509 (600-1)	1720-1½ 509 (600-1½)	NA

MIRL Rwys 16-34 L

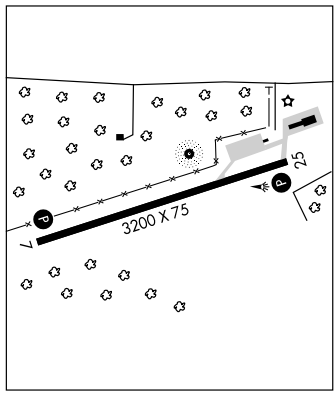
SAUK CENTRE MUNI (D39) 2 SE UTC−6(−5DT) N45°42.39′ W94°56.00′ — TWIN CITIES
1244 B S3 **FUEL** 100LL TPA—2044(800) NOTAM FILE PNM — L–14H
RWY 14–32: H3300X60 (ASPH) LIRL — IAP
RWY 08–26: 2270X140 (TURF)
RWY 26: Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Fuel avbl 24 hrs with credit card. Rwy 08–26 CLOSED winter months. Rwy 08–26 rough ride. Based acft not using rwy. Ultralight tfc on and invof arpt. Rwy 08–26 marked with yellow cones.
WEATHER DATA SOURCES: AWOS–3 (320) 352–0136.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 126.1
RADIO AIDS TO NAVIGATION: NOTAM FILE AXN.
ALEXANDRIA (L) VORW/DME 112.8 AXN Chan 75 N45°57.50′ W95°13.96′ 133° 19.7 NM to fld. 1367/7E. **HIWAS.**



SCOTT N48°15.60′ W92°28.48′ NOTAM FILE CDD. — GREEN BAY
NDB (MHW) 385 SCG at Scotts SPB. **AWOS–3.** VFR only.

SCOTTS SPB (See CRANE LAKE)

SILVER BAY MUNI (BFW) 7 SW UTC−6(−5DT) N47°14.94′ W91°24.94′ — GREEN BAY
1089 B **FUEL** 100LL NOTAM FILE BFW — L–14I
RWY 07–25: H3200X75 (ASPH) S–26 MIRL — IAP
RWY 07: REIL. PAPI(P4L).
RWY 25: REIL. PAPI(P4L)—GA 3.0°.
AIRPORT REMARKS: Unattended. Self serve fuel avbl 24 hrs. Caution—deer and wildlife on and invof arpt. Ultralight tfc on and invof arpt. ACTIVATE MIRL Rwy 07–25, REIL Rwy 07 and Rwy 25 and PAPI Rwy 07 and Rwy 25—CTAF.
WEATHER DATA SOURCES: AWOS–3 350 BFW (218) 226–3537.
COMMUNICATIONS: CTAF 122.9
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 134.55
RADIO AIDS TO NAVIGATION: NOTAM FILE DLH.
DULUTH (H) VORTACW 112.6 DLH Chan 73 N46°48.13′ W92°12.17′ 045° 42.0 NM to fld. 1428/5E.
NDB (MHW) 350 BFW N47°15.04′ W91°24.84′ at fld. **AWOS–3.** NOTAM FILE PNM.



SKY HARBOR (See DULUTH)

SKY HARBOR SPB (See EVELETH)

APP CRS	Rwy Idg	3300
327°	TDZE	1234
	Apt Elev	1244

GPS RWY 32

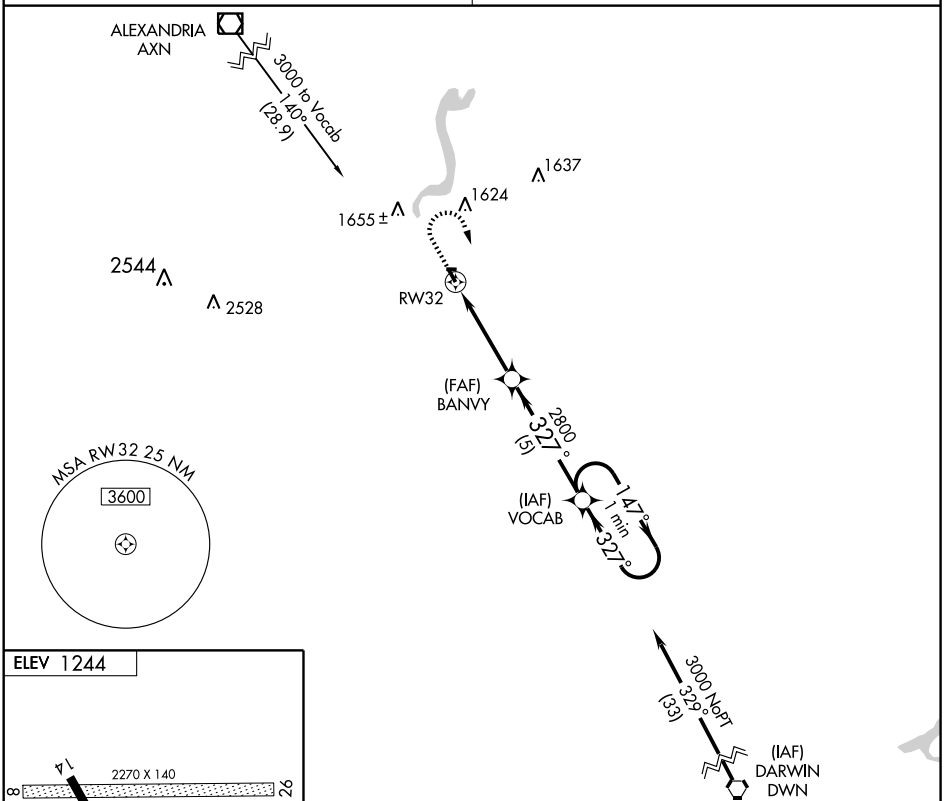
SAUK CENTRE MUNI (D39)

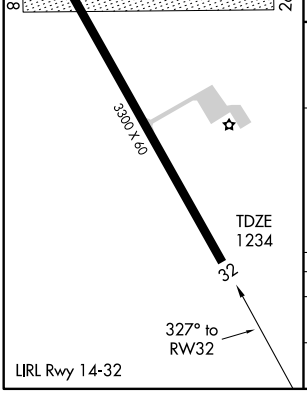
NA

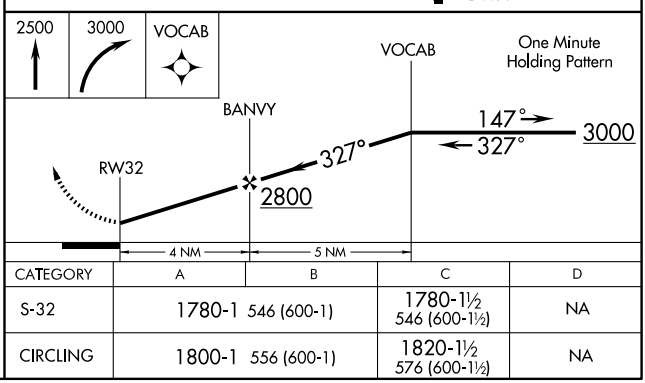
Use Alexandria Chandler Field altimeter setting.

MISSED APPROACH: Climb to 2500 then climbing right turn to 3000 direct VOCAB WP and hold.

MINNEAPOLIS CENTER	CTAF
126.1 269.2	122.9



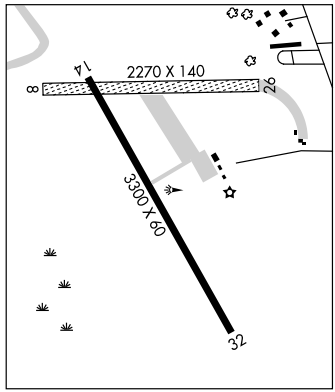




CATEGORY	A	B	C	D
S-32	1780-1 546 (600-1)		1780-1½ 546 (600-1½)	NA
CIRCLING	1800-1 556 (600-1)		1820-1½ 576 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

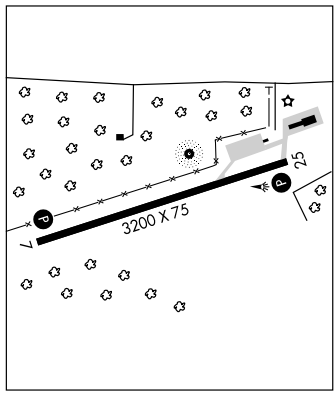
SAUK CENTRE MUNI (D39) 2 SE UTC−6(−5DT) N45°42.39′ W94°56.00′ — TWIN CITIES
1244 B S3 **FUEL** 100LL TPA—2044(800) NOTAM FILE PNM — L–14H
RWY 14–32: H3300X60 (ASPH) LIRL — IAP
RWY 08–26: 2270X140 (TURF)
RWY 26: Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. Fuel avbl 24 hrs with credit card. Rwy 08–26 CLOSED winter months. Rwy 08–26 rough ride. Based acft not using rwy. Ultralight tfc on and invof arpt. Rwy 08–26 marked with yellow cones.
WEATHER DATA SOURCES: AWOS–3 (320) 352–0136.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 126.1
RADIO AIDS TO NAVIGATION: NOTAM FILE AXN.
ALEXANDRIA (L) VORW/DME 112.8 AXN Chan 75 N45°57.50′ W95°13.96′ 133° 19.7 NM to fld. 1367/7E. **HIWAS.**



SCOTT N48°15.60′ W92°28.48′ NOTAM FILE CDD. — GREEN BAY
NDB (MHW) 385 SCG at Scotts SPB. **AWOS–3.** VFR only.

SCOTTS SPB (See CRANE LAKE)

SILVER BAY MUNI (BFW) 7 SW UTC−6(−5DT) N47°14.94′ W91°24.94′ — GREEN BAY
1089 B **FUEL** 100LL NOTAM FILE BFW — L–14I
RWY 07–25: H3200X75 (ASPH) S–26 MIRL — IAP
RWY 07: REIL. PAPI(P4L).
RWY 25: REIL. PAPI(P4L)—GA 3.0°.
AIRPORT REMARKS: Unattended. Self serve fuel avbl 24 hrs. Caution—deer and wildlife on and invof arpt. Ultralight tfc on and invof arpt. ACTIVATE MIRL Rwy 07–25, REIL Rwy 07 and Rwy 25 and PAPI Rwy 07 and Rwy 25—CTAF.
WEATHER DATA SOURCES: AWOS–3 350 BFW (218) 226–3537.
COMMUNICATIONS: CTAF 122.9
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 134.55
RADIO AIDS TO NAVIGATION: NOTAM FILE DLH.
DULUTH (H) VORTACW 112.6 DLH Chan 73 N46°48.13′ W92°12.17′ 045° 42.0 NM to fld. 1428/5E.
NDB (MHW) 350 BFW N47°15.04′ W91°24.84′ at fld. **AWOS–3.** NOTAM FILE PNM.



SKY HARBOR (See DULUTH)

SKY HARBOR SPB (See EVELETH)

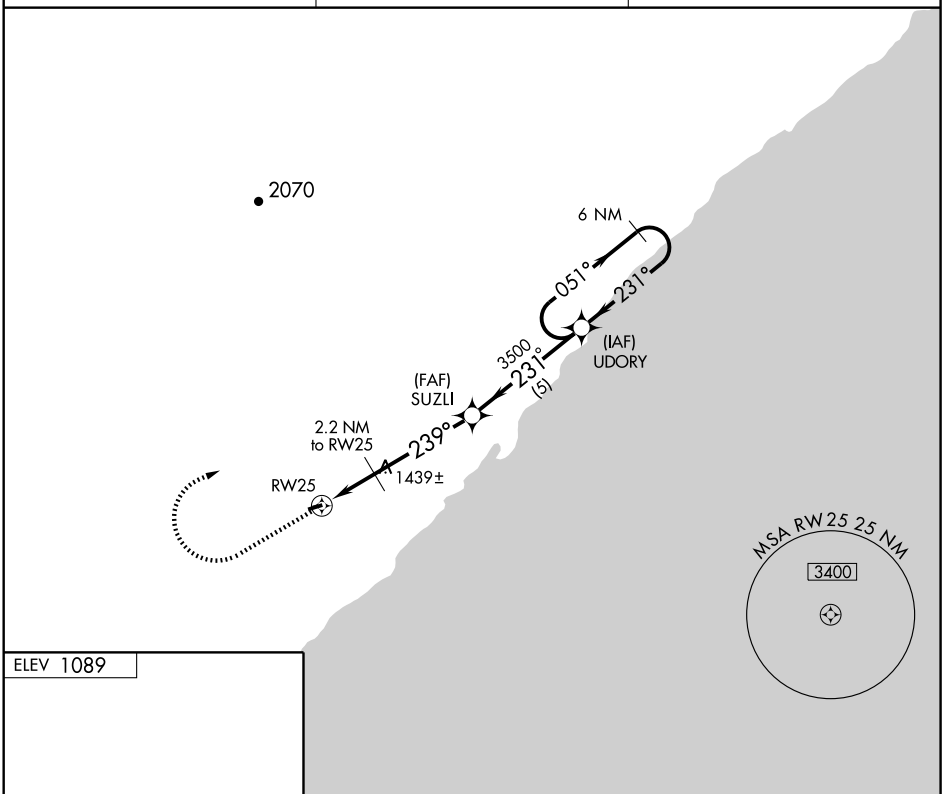
APP CRS	Rwy Idg	3200
239°	TDZE	1089
	Apt Elev	1089

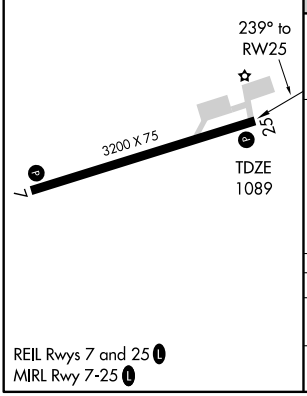
GPS RWY 25
SILVER BAY MUNI (BFW)

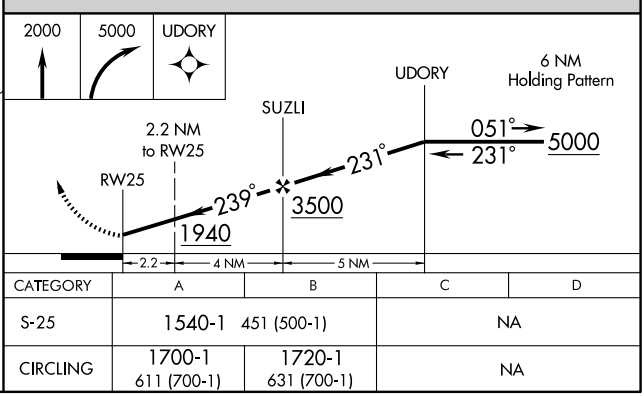
NA

MISSED APPROACH: Climb to 2000 then climbing right turn to 5000 direct UDORY WP and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
350	134.55 290.5	122.9 L







CATEGORY	A	B	C	D
S-25	1540-1 451 (500-1)		NA	
CIRCLING	1700-1 611 (700-1)	1720-1 631 (700-1)	NA	

REIL Rwys 7 and 25 L
MIRL Rwy 7-25 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

NDB BFW 350	APP CRS 264°	Rwy Idg 3200 TDZE 1089 Apt Elev 1089

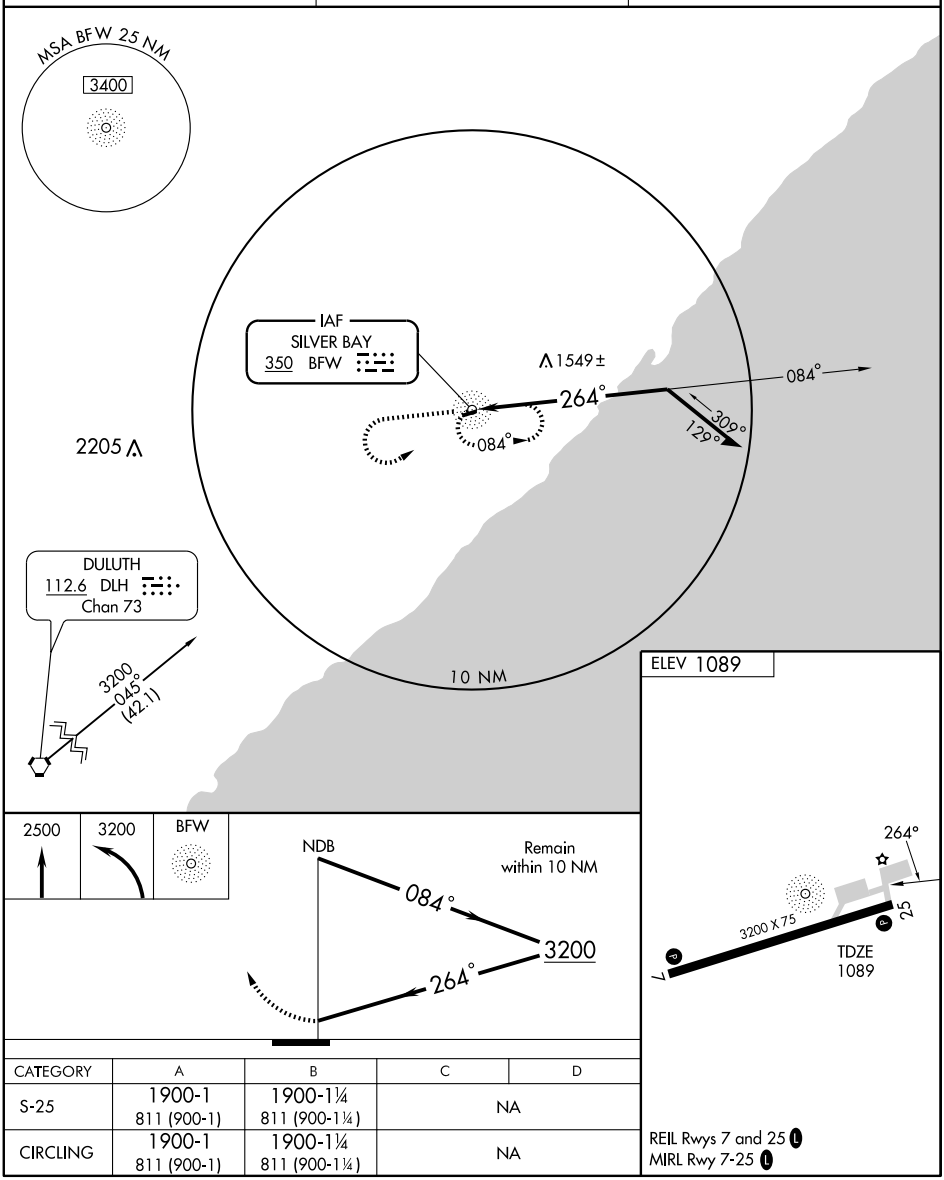
NDB RWY 25

SILVER BAY MUNI (BFW)

NA

MISSED APPROACH: Climb to 2500 then climbing left turn to 3200 direct BFW NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
350	134.55 290.5	122.9 L

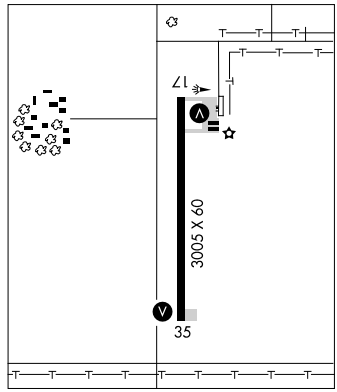


CATEGORY	A	B	C	D
S-25	1900-1 811 (900-1)	1900-1¼ 811 (900-1¼)	NA	
CIRCLING	1900-1 811 (900-1)	1900-1¼ 811 (900-1¼)	NA	

REIL Rwys 7 and 25 L
MIRL Rwy 7-25 L

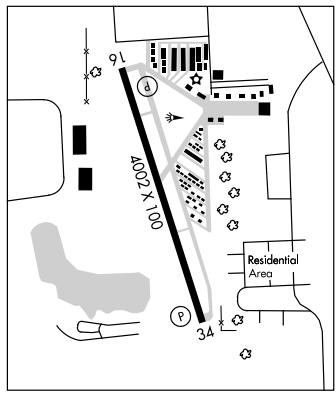
NC-1, 21 OCT 2010 to 18 NOV 2010

SLAYTON MUNI (DVP) 1 W UTC−6(−5DT) N43°59.21′ W95°46.96′ OMAHA
1623 B **FUEL** 100LL TPA—2423(800) NOTAM FILE DVP L–12I
RWY 17–35: H3005X60 (ASPH) LIRL (NSTD) 0.3% up S IAP
RWY 17: REIL. SAVASI(V2L)—GA 3.0° TCH 21′. Road.
RWY 35: REIL. SAVASI(V2L)—GA 3.0° TCH 21′. Road.
AIRPORT REMARKS: Unattended. For svc call 507–836–6460. Rwy 17–35 LIRL NSTD due to spacing. ACTIVATE LIRL Rwy 17–35, SAVASI Rwy 17 and Rwy 35, REIL Rwy 17 and Rwy 35—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.55 (507) 836–6128.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 132.05
RADIO AIDS TO NAVIGATION: NOTAM FILE OTG.
WORTHINGTON (L) VOR/DME 110.6 OTG Chan 43 N43°38.82′ W95°34.92′ 329° 22.2 NM to fld. 1571/8E.



SLEEPY EYE MUNI (Y58) 3 SE UTC−6(−5DT) N44°15.00′ W94°43.02′ OMAHA
1004 NOTAM FILE PNM
RWY 14–32: 2570X300 (TURF) LIRL (NSTD)
RWY 32: Trees.
RWY 04–22: 2440X300 (TURF)
AIRPORT REMARKS: Unattended. Rwy 04–22 CLOSED winter months. Rwy 14–32 marked with yellow cones. Rwy 04–22 marked with yellow cones. Rwy 14–32 end lgts not in the same location as end cones. Rwy 14–32 NSTD LIRL due to variable spacing.
COMMUNICATIONS: CTAF 122.9

SOUTH ST PAUL MUNI–RICHARD E FLEMING FLD (SGS) 2 S UTC−6(−5DT) TWIN CITIES
N44°51.43′ W93°01.97′ L–12J, 14I, A
821 B S3 **FUEL** 80, 100LL, JET A TPA—1721(900) NOTAM FILE SGS IAP
RWY 16–34: H4002X100 (ASPH) S–30, D–57 MIRL
RWY 16: PAPI(P4L)—GA 3.0° TCH 40′. Trees.
RWY 34: PAPI(P4L)—GA 3.0° TCH 40′. Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡, Sat–Sun 1600–2300Z‡. Self serve fuel avbl with credit card 24 hours. Waterfowl on and invof arpt. Extended tfc pattern ops N of arpt may conflict with St Paul downtown arpt controlled airspace. Ctc St Paul twr 119.1. Frequent helicopter ops over Mississippi River East of arpt blo 2200′ MSL. MIRL Rwy 16–34 preset low ints, to increase ints ACTIVATE—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.425 (651) 457-8120.
COMMUNICATIONS: CTAF/UNICOM 122.7
Ⓡ **MINNEAPOLIS APP/DEP CON** 121.2 **MINNEAPOLIS CLNC DEL** 118.2
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
FARMINGTON (H) VORTAC 115.7 FGT Chan 104 N44°37.86′ W93°10.92′ 019° 15.0 NM to fld. 972/6E.
HOPEY NDB (MHW) 400 PPI N44°52.40′ W92°56.53′ 253° 4.0 NM to fld. NOTAM FILE STP.
LOC/DME 108.35 I–SGS Chan 20Y LOC only.



SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FLD (See MARSHALL)

SPIDA N46°50.04′ W94°58.53′ NOTAM FILE PKD. TWIN CITIES
NDB (LOM) 269 PK 311° 5.7 NM to Park Rapids Muni–Konshok Fld.

APP CRS	Rwy Idg	3005
356°	TDZE	1623
	Apt Elev	1623

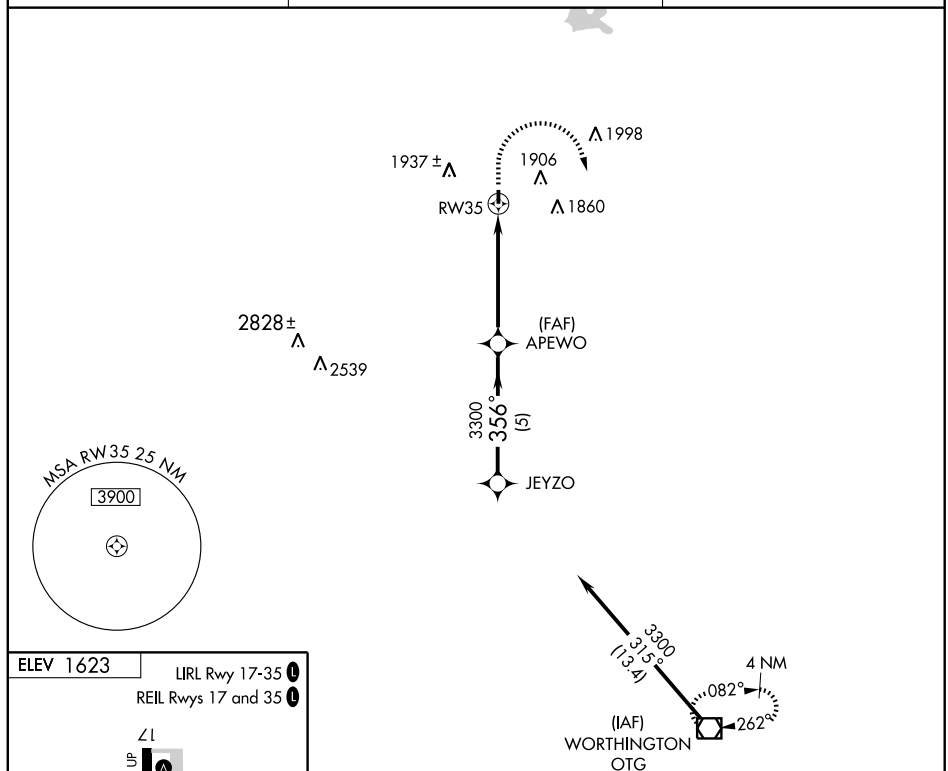
GPS RWY 35
SLAYTON MUNI (DVP)

NA

Use Worthington altimeter setting.

MISSED APPROACH: Climb to 3300, then right turn direct OTG VOR/DME and hold.

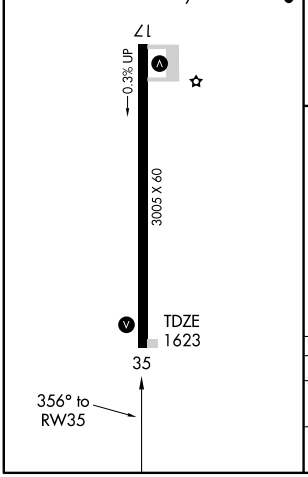
AWOS-3	MINNEAPOLIS CENTER	CTAF
118.55	132.05 317.4	122.9 L

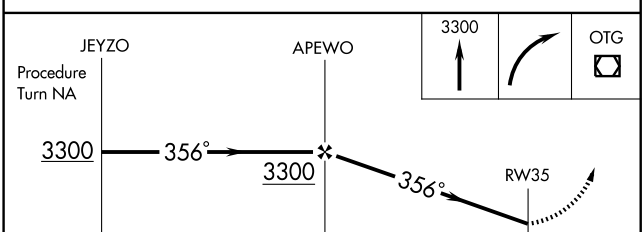


ELEV 1623

LIRL Rwy 17-35 L

REIL Rwys 17 and 35 L





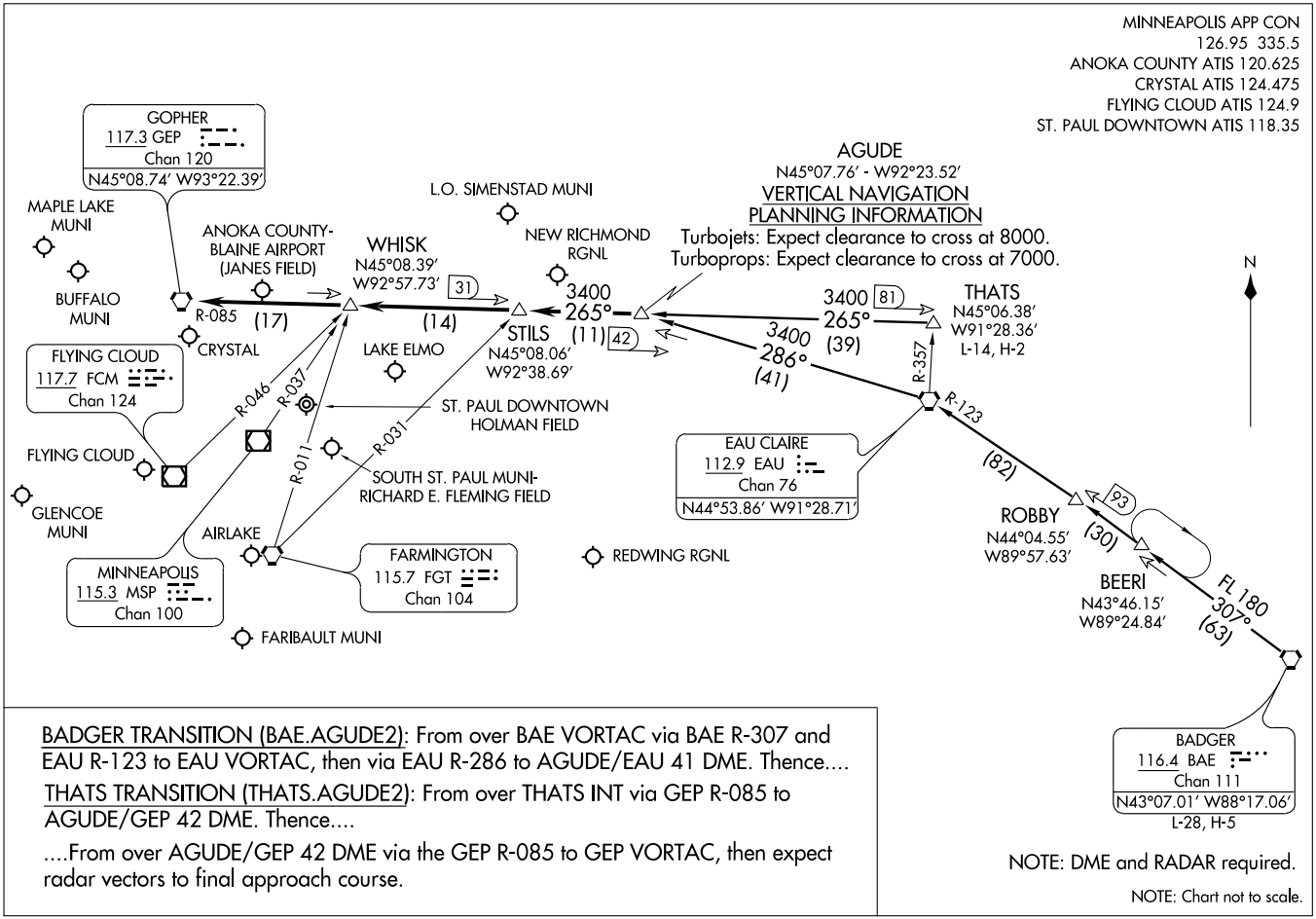
CATEGORY	A	B	C	D
S-35	2080-1 457 (500-1)		NA	
CIRCLING	2180-1 557 (600-1)	2220-1 597 (600-1)	NA	

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NC-1, 21 OCT 2010 to 18 NOV 2010

AGUDE TWO ARRIVAL

(AGUDE.AGUDE2) 10154

MINNEAPOLIS-ST. PAUL, MINNESOTA



BADGER TRANSITION (BAE.AGUDE2): From over BAE VORTAC via BAE R-307 and EAU R-123 to EAU VORTAC, then via EAU R-286 to AGUDE/EAU 41 DME. Thence....

THATS TRANSITION (THATS.AGUDE2): From over THATS INT via GEP R-085 to AGUDE/GEP 42 DME. Thence....

....From over AGUDE/GEP 42 DME via the GEP R-085 to GEP VORTAC, then expect radar vectors to final approach course.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

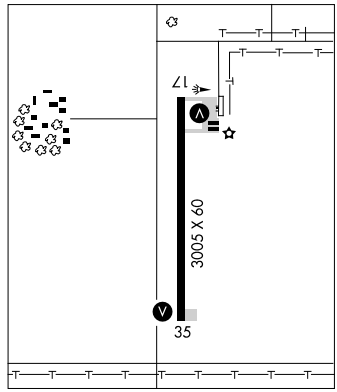
(AGUDE.AGUDE2) 10154

AGUDE TWO ARRIVAL

ST-263 (FAA)

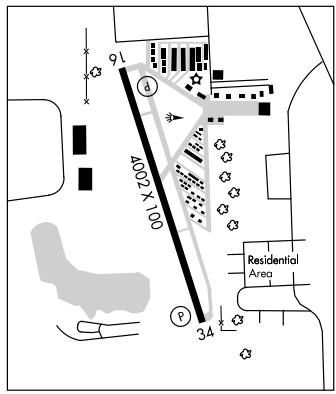
MINNEAPOLIS-ST. PAUL, MINNESOTA

SLAYTON MUNI (DVP) 1 W UTC−6(−5DT) N43°59.21′ W95°46.96′ OMAHA
1623 B **FUEL** 100LL TPA—2423(800) NOTAM FILE DVP L–12I
RWY 17–35: H3005X60 (ASPH) LIRL (NSTD) 0.3% up S IAP
RWY 17: REIL. SAVASI(V2L)—GA 3.0° TCH 21′. Road.
RWY 35: REIL. SAVASI(V2L)—GA 3.0° TCH 21′. Road.
AIRPORT REMARKS: Unattended. For svc call 507–836–6460. Rwy 17–35 LIRL NSTD due to spacing. ACTIVATE LIRL Rwy 17–35, SAVASI Rwy 17 and Rwy 35, REIL Rwy 17 and Rwy 35—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.55 (507) 836–6128.
COMMUNICATIONS: CTAF 122.9
MINNEAPOLIS CENTER APP/DEP CON 132.05
RADIO AIDS TO NAVIGATION: NOTAM FILE OTG.
WORTHINGTON (L) VOR/DME 110.6 OTG Chan 43 N43°38.82′ W95°34.92′ 329° 22.2 NM to fld. 1571/8E.



SLEEPY EYE MUNI (Y58) 3 SE UTC−6(−5DT) N44°15.00′ W94°43.02′ OMAHA
1004 NOTAM FILE PNM
RWY 14–32: 2570X300 (TURF) LIRL (NSTD)
RWY 32: Trees.
RWY 04–22: 2440X300 (TURF)
AIRPORT REMARKS: Unattended. Rwy 04–22 CLOSED winter months. Rwy 14–32 marked with yellow cones. Rwy 04–22 marked with yellow cones. Rwy 14–32 end lgts not in the same location as end cones. Rwy 14–32 NSTD LIRL due to variable spacing.
COMMUNICATIONS: CTAF 122.9

SOUTH ST PAUL MUNI–RICHARD E FLEMING FLD (SGS) 2 S UTC−6(−5DT) TWIN CITIES
N44°51.43′ W93°01.97′ L–12J, 14I, A
821 B S3 **FUEL** 80, 100LL, JET A TPA—1721(900) NOTAM FILE SGS IAP
RWY 16–34: H4002X100 (ASPH) S–30, D–57 MIRL
RWY 16: PAPI(P4L)—GA 3.0° TCH 40′. Trees.
RWY 34: PAPI(P4L)—GA 3.0° TCH 40′. Trees.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡, Sat–Sun 1600–2300Z‡. Self serve fuel avbl with credit card 24 hours. Waterfowl on and invof arpt. Extended tfc pattern ops N of arpt may conflict with St Paul downtown arpt controlled airspace. Ctc St Paul twr 119.1. Frequent helicopter ops over Mississippi River East of arpt blo 2200′ MSL. MIRL Rwy 16–34 preset low ints, to increase ints ACTIVATE—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.425 (651) 457-8120.
COMMUNICATIONS: CTAF/UNICOM 122.7
Ⓡ **MINNEAPOLIS APP/DEP CON** 121.2 **MINNEAPOLIS CLNC DEL** 118.2
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
FARMINGTON (H) VORTAC 115.7 FGT Chan 104 N44°37.86′ W93°10.92′ 019° 15.0 NM to fld. 972/6E.
HOPEY NDB (MHW) 400 PPI N44°52.40′ W92°56.53′ 253° 4.0 NM to fld. NOTAM FILE STP.
LOC/DME 108.35 I–SGS Chan 20Y LOC only.



SOUTHWEST MINNESOTA RGNL MARSHALL/RYAN FLD (See MARSHALL)

SPIDA N46°50.04′ W94°58.53′ NOTAM FILE PKD. TWIN CITIES
NDB (LOM) 269 PK 311° 5.7 NM to Park Rapids Muni–Konshok Fld.

LOC/DME I-SGS	APP CRS	Rwy Idg	4002
108.35	339°	TDZE	819
Chan 20 (Y)		Apt Elev	820

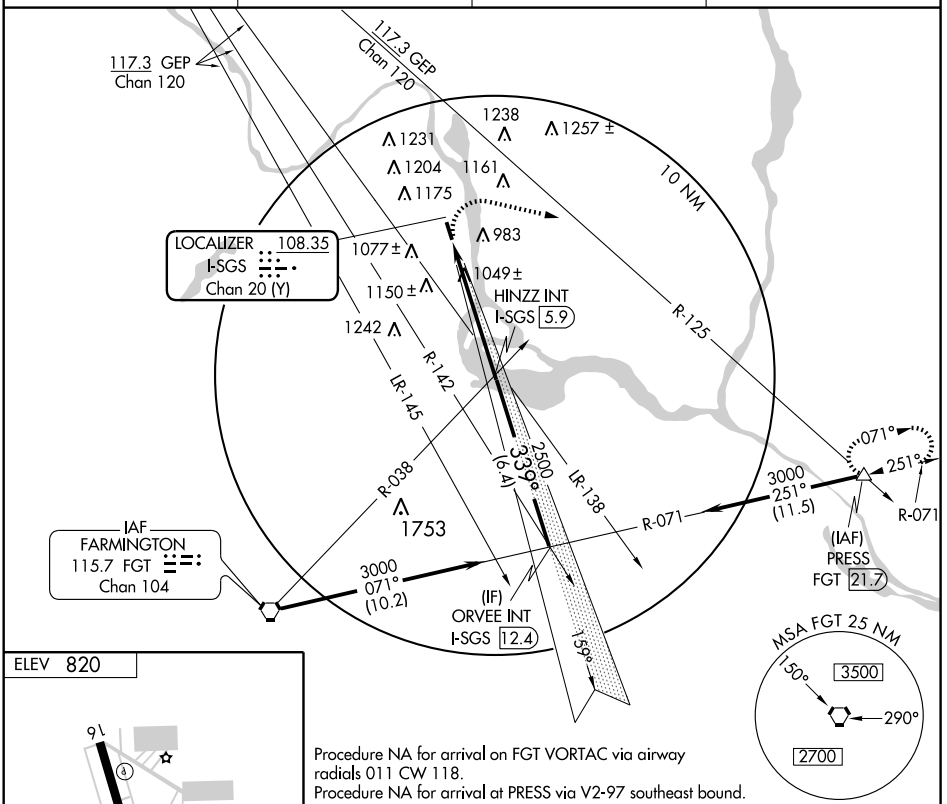
LOC RWY 34

SOUTH ST. PAUL MUNI-RICHARD E. FLEMING FIELD (SGS)

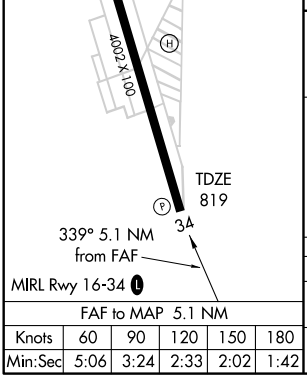
NA When local altimeter setting not received, use Minneapolis-St. Paul Intl/Wold-Chamberlain altimeter setting and increase all MDAs 40 feet; and all visibilities ¼ mile.

MISSED APPROACH: Climbing right turn to 3000 via heading 100° and GEP VORTAC R-125 to PRESS Int/FGT 21.7 DME and hold.

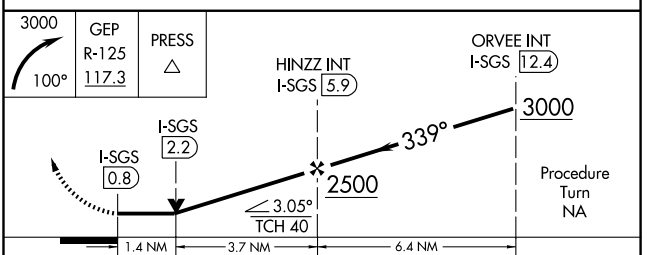
AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
119.425	121.2 335.5	118.2	122.7 (CTAF) L



Procedure NA for arrival on FGT VORTAC via airway radials 011 CW 118.
Procedure NA for arrival at PRESS via V2-97 southeast bound.



FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42



CATEGORY	A	B	C	D
S-34	1300-1 481 (500-1)		1300-1¼ 481 (500-1¼)	1300-1½ 481 (500-1½)
CIRCLING	1300-1 480 (500-1)	1420-1 600 (600-1)	1540-2 720 (800-2)	1540-2¼ 720 (800-2¼)

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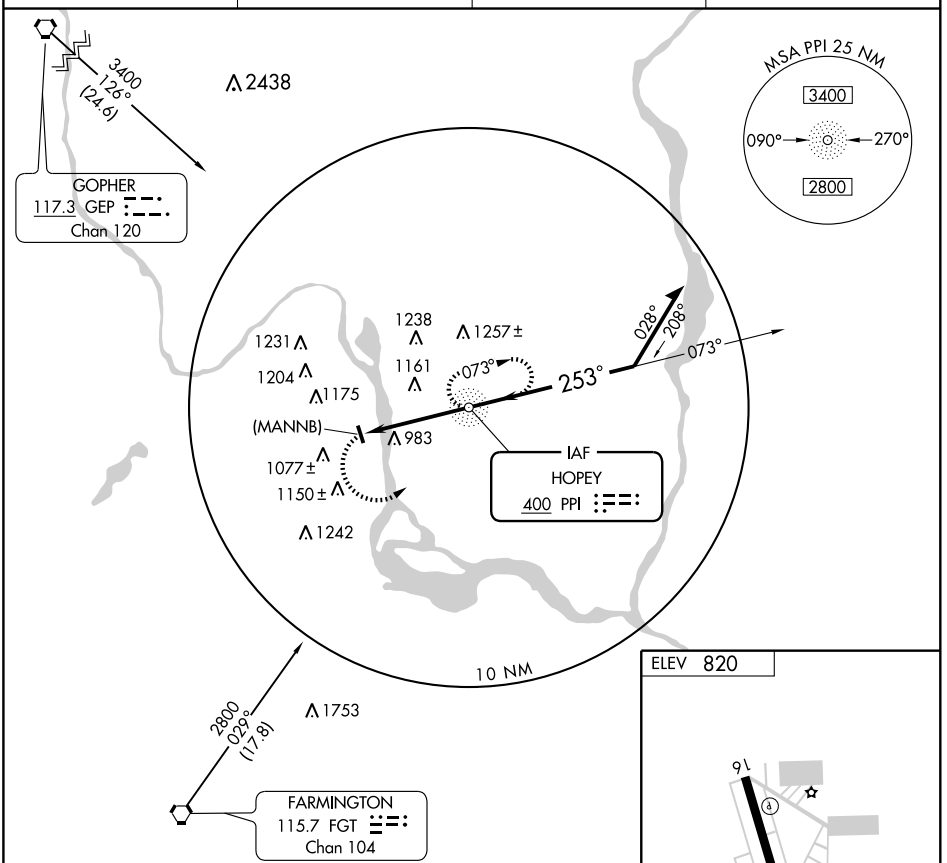
NDB PPI	APP CRS	Rwy Idg	N/A
400	253°	TDZE	N/A
		Apt Elev	820

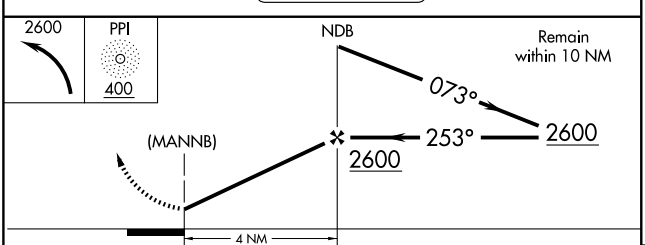
NDB or GPS-B

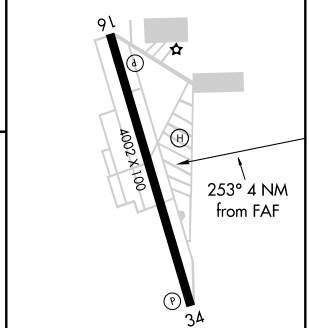
SOUTH ST. PAUL MUNI-RICHARD E. FLEMING FIELD (SGS)

MISSED APPROACH: Climbing left turn to 2600 direct PPI NDB and hold.

AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
119.425	121.2 335.5	118.2	122.7 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	1480-1 660 (700-1)		1480-1¾ 660 (700-1¾)	1480-2 660 (700-2)

FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	4002
339°	TDZE	819
	Apt Elev	820

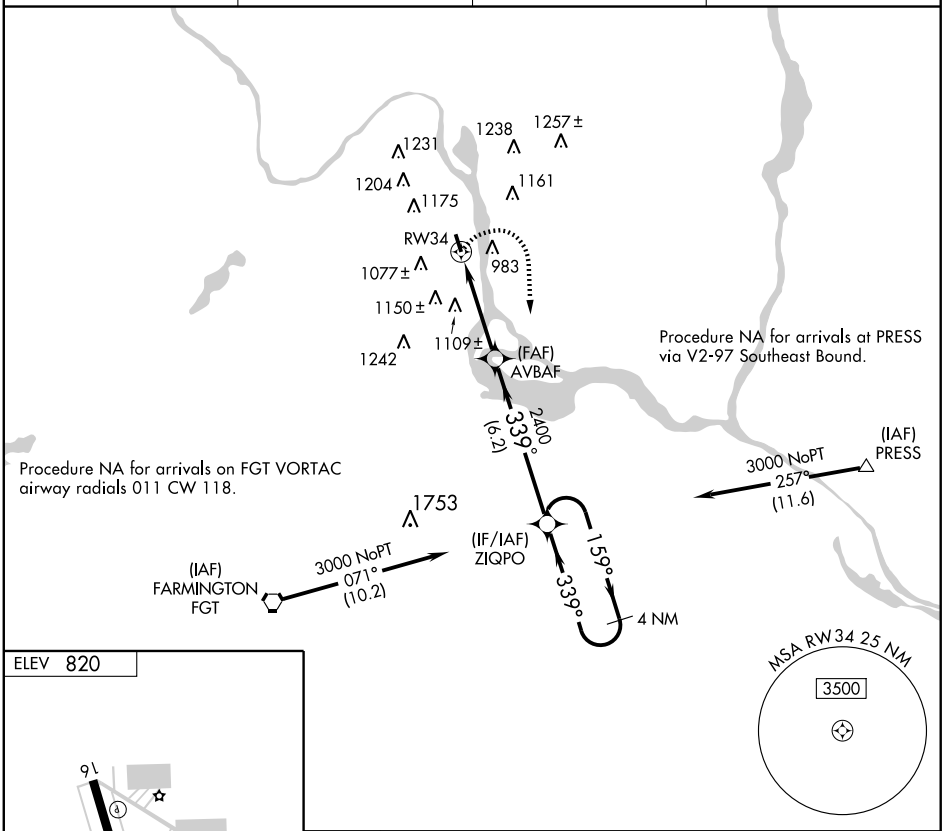
RNAV (GPS) RWY 34

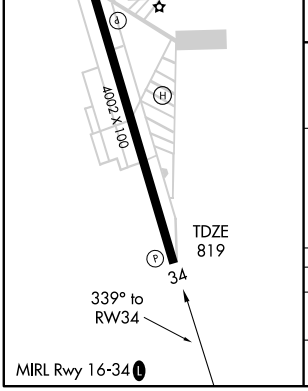
SOUTH ST. PAUL MUNI-RICHARD E. FLEMING FIELD (SGS)

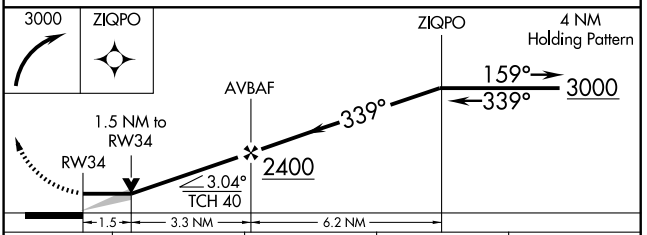
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Minneapolis-St Paul Intl altimeter setting and increase all MDA 40 feet and increase Circling Cats. C and D visibility ¼ mile. VDP NA with Minneapolis-St Paul Intl altimeter setting.

MISSED APPROACH: Climbing right turn to 3000 direct ZIQPO and hold.

AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
119.425	121.2 335.5	118.2	122.7 (CTAF) L



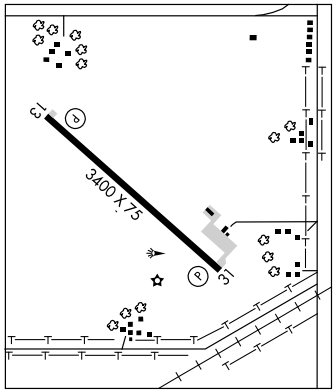




CATEGORY	A	B	C	D
LNAV MDA	1340-1	521 (600-1)	1340-1½ 521 (600-1½)	1340-1¾ 521 (600-1¾)
CIRCLING	1400-1	580 (600-1)	1540-2 720 (800-2)	1540-2¼ 720 (800-2¼)

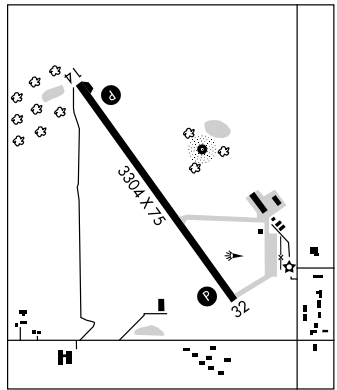
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

SPRINGFIELD MUNI (D42) 1 SW UTC−6(−5DT) N44°13.86′ W94°59.94′ OMAHA
1072 B **FUEL** 100LL NOTAM FILE PNM L–12I
RWY 13–31: H3400X75 (ASPH) S–12 MIRL IAP
RWY 13: REIL. PAPI(P2L)—GA 3.0° TCH 20′. Road. Rgt tfc.
RWY 31: REIL. PAPI(P2L)—GA 3.0° TCH 20′.
AIRPORT REMARKS: Attended Mon–Fri 1430–2200Z‡, Sat 1430–1800Z‡. For svc after hrs call 507–723–3514 or 8881. Ultralight tfc on and invof arpt. Rwy 13–31 2″ cracks at sawcuts with secondary cracking. MIRL Rwy 13–31 preset on low ints, to increase ints—CTAF. PAPI Rwy 13 and Rwy 31 on continuously. REIL Rwy 13 and Rwy 31 5 clicks med and 7 clicks high, 3 clicks off.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.1
RADIO AIDS TO NAVIGATION: NOTAM FILE RWF.
REDWOOD FALLS (H) VORW/DME 113.3 RWF Chan 80
N44°28.04′ W95°07.69′
152° 15.2 NM to fld. 1061/7E. **HIWAS.**



STANTON AIRFIELD (SYN) 1 E UTC−6(−5DT) N44°28.53′ W93°00.98′ OMAHA
920 S4 **FUEL** 100LL, MOGAS TPA—1720(800) NOTAM FILE SYN
RWY 18–36: 2550X200 (TURF)
RWY 18: Hill. **RWY 36:** Thld dsplcd 300′. Road.
RWY 09–27: 1970X180 (TURF)
RWY 09: Trees. **RWY 27:** Road.
AIRPORT REMARKS: Attended 1400Z‡–SS. For svc 507–645–4030 or 612–652–2280. Arpt CLOSED ngts. Glider ops on and invof arpt, surface thru 8000′ MSL weekends during dalgt hrs, except winter months. Rwy 09–27 marked with yellow cones. Rwy 18–36 and dsplcd thld Rwy 36 marked with yellow cones.
WEATHER DATA SOURCES: AWOS–3 119.35 (507) 664–3806.
COMMUNICATIONS: CTAF/UNICOM 122.8

STAPLES MUNI (SAZ) 2 NW UTC−6(−5DT) N46°22.85′ W94°48.40′ TWIN CITIES
1287 B **FUEL** 100LL NOTAM FILE SAZ L–14H
RWY 14–32: H3304X75 (ASPH) MIRL IAP
RWY 14: REIL. PAPI(P4L)—GA 3.0° TCH 27′. Road.
RWY 32: REIL. PAPI(P4L)—GA 3.0° TCH 27′. Road.
AIRPORT REMARKS: Unattended. Self serve fuel available 24 hrs with credit card. Occasional helicopter ops hospital helipad .89 NM ESE Rwy 14–32. To increase intensity and ACTIVATE MIRL Rwy 14–32 and PAPI Rwy 14 and Rwy 32 and REIL Rwy 14 and Rwy 32—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.325 (218) 894–3666.
COMMUNICATIONS: CTAF 122.9
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 118.05
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE AXN.
ALEXANDRIA (L) VORW/DME 112.8 AXN Chan 75 N45°57.50′ W95°13.96′ 028° 31.0 NM to fld. 1367/7E. **HIWAS.**
NDB (MHW) 257 SAZ N46°22.94′ W94°48.30′ at fld. Unmonitored. NOTAM FILE SAZ.



VOR/DME RWF	APP CRS	Rwy Idg	3400
113.3	152°	TDZE	1072
Chan 80		Apt Elev	1072

VOR/DME or GPS RWY 13

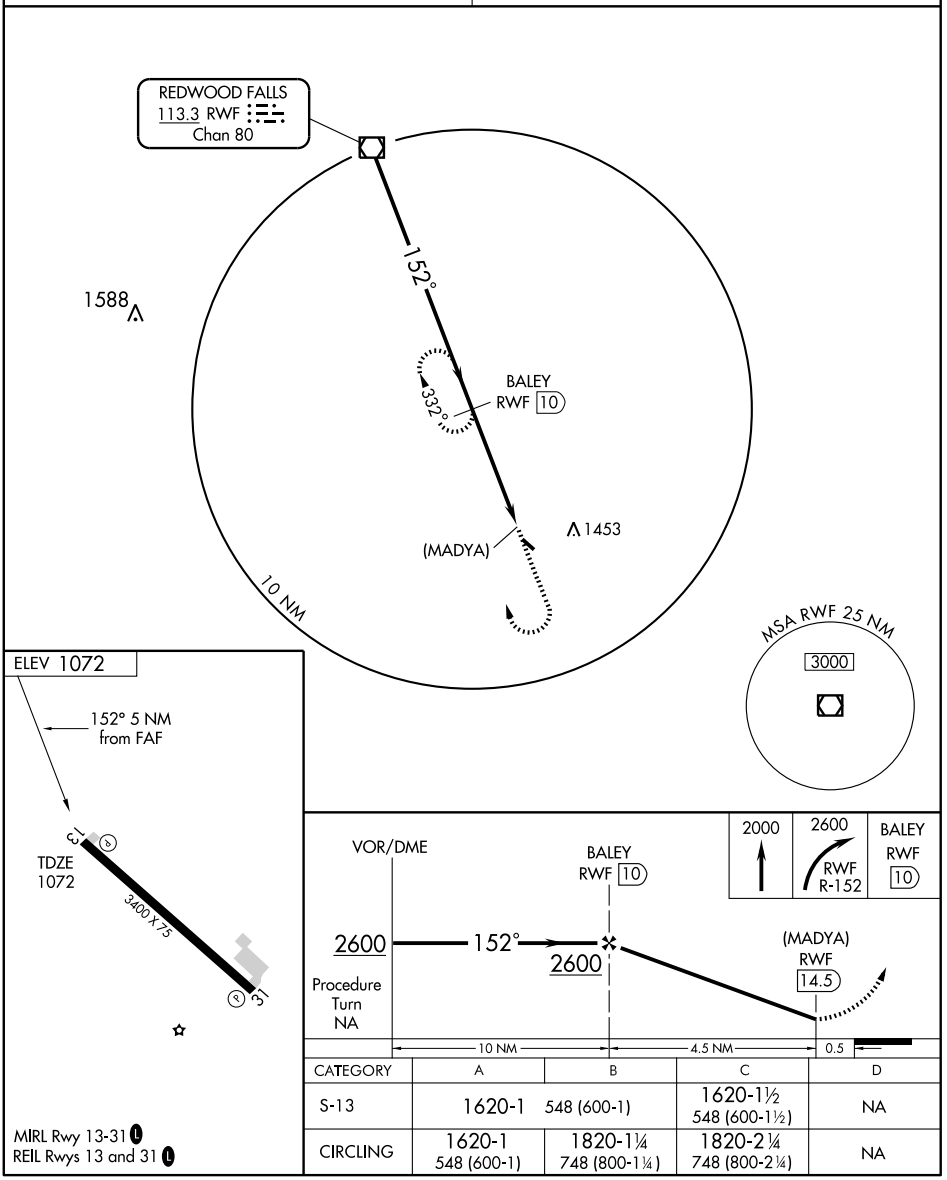
SPRINGFIELD MUNI (D42)

NA

Use Redwood Falls, MN altimeter setting.

MISSED APPROACH: Climb to 2000 then climbing right turn to 2600 via RWF R-152 to BALEY 10 DME and hold.

MINNEAPOLIS CENTER	UNICOM
127.1 290.2	122.8 (CTAF) L



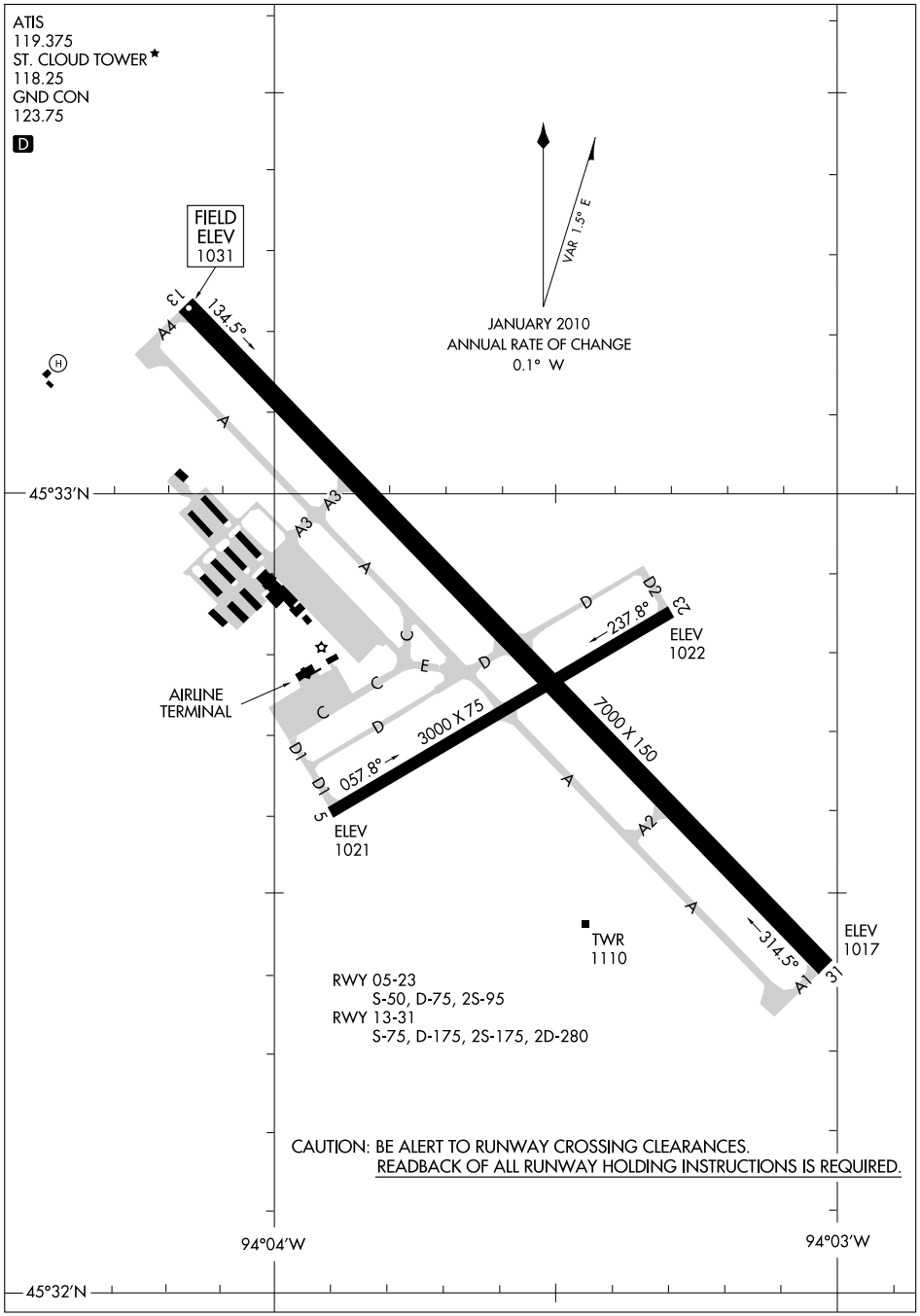
CATEGORY	A	B	C	D
S-13	1620-1	548 (600-1)	1620-1½ 548 (600-1½)	NA
CIRCLING	1620-1 548 (600-1)	1820-1¼ 748 (800-1¼)	1820-2¼ 748 (800-2¼)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

AIRPORT DIAGRAM

AL-5799 (FAA)

ST. CLOUD RGNL (STC)
ST. CLOUD, MINNESOTA



RWY 05-23
S-50, D-75, 2S-95
RWY 13-31
S-75, D-175, 2S-175, 2D-280

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

NC-1, 21 OCT 2010 to 18 NOV 2010

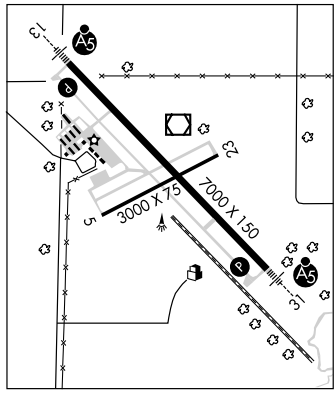
NC-1, 21 OCT 2010 to 18 NOV 2010

ST CLOUD RGNL (STC) 4 E UTC−6(−5DT) N45°32.79′ W94°03.59′ **TWIN CITIES**
1031 B S4 **FUEL** 100LL, JET A OX 1 TPA—1831(800) Class I, ARFF Index A **H–2J, L–14H**
NOTAM FILE STC **IAP, AD**

RWY 13–31: H7000X150 (CONC–GRVD) S–75, D–175, 2S–175, 2D–280 HIRL
RWY 13: MALSR. PAPI(P4R). TCH 50′.
RWY 31: MALSR. PAPI(P4L). TCH 50′.
RWY 05–23: H3000X75 (ASPH–PFC) S–50, D–75, 2S–95 MIRL
RWY 05: Tree. **RWY 23:** Trees.

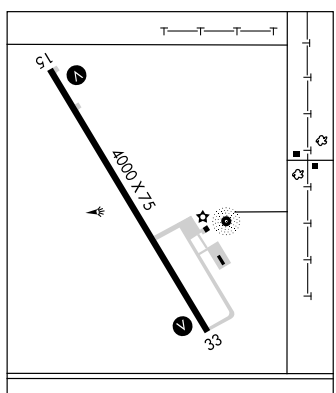
RUNWAY DECLARED DISTANCE INFORMATION

RWY 05:	TORA–3000	TODA–3000	ASDA–3000	LDA–3000
RWY 13:	TORA–7000	TODA–7000	ASDA–7000	LDA–7000
RWY 23:	TORA–3000	TODA–3000	ASDA–3000	LDA–3000
RWY 31:	TORA–7000	TODA–7000	ASDA–7000	LDA–7000



AIRPORT REMARKS: Attended 1100–0530Z‡. Deer, migratory waterfowl and other wildlife on and invof arpt. Crop dusting operations on invof arpt during summer months. Line of sight visibility is restricted from the Rwy 13 and 23 approach and Rwy 13 and 05 approach. Helipad not visible from ATCT and approach surfaces. 24 hrs PPR for unscheduled air carrier ops with more than 30 passenger seats call arpt manager 320–255–3251. Flight training on and invof arpt. Rwy 05–23 not avbl for air carrier ops utilizing acft with more than 9 passenger seats. Rwy 31 calm wind rwy. Rwy 13–31 200′ blast pad each end. HIRL Rwy 13–31 and MIRL Rwy 05–23 preset on low ints, to increase ints and ACTIVATE PAPI Rwy 13 and Rwy 31, and MALSR Rwy 13 and Rwy 31—CTAF.
WEATHER DATA SOURCES: ASOS 112.1 STC (320) 240–8781.
COMMUNICATIONS: CTAF 118.25 **ATIS** 119.375 **UNICOM** 123.75
RCO 122.5 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 121.05
ST CLOUD TOWER 118.25 (1300–0500Z‡) **GND CON** 123.75
AIRSPACE: CLASS D svc 1300–0500Z‡ other times CLASS E.
RADIO AIDS TO NAVIGATION: NOTAM FILE STC.
(T) VORW/DME 112.1 STC Chan 58 N45°32.96′ W94°03.52′ at fld. 1023/3E. **ASOS.** VOR unmonitored.
HUSSK NDB (LOM) 342 ST N45°28.74′ W93°58.12′ 314° 5.6 NM to fld.
ILS 111.9 I–STC Rwy 31. Class IC. LOM HUSSK NDB.
ILS 111.9 I–BPM Rwy 13. Class IT.

ST JAMES MUNI (JYG) 3E UTC−6(−5DT) N43°59.18′ W94°33.48′ **OMAHA**
1067 B **FUEL** 100LL NOTAM FILE JYG **L–12I**
RWY 15–33: H4000X75 (ASPH) MIRL **IAP**
RWY 15: REIL. VASI(V2L)—GA 3.0° TCH 24′.
RWY 33: REIL. VASI(V2L)—GA 3.0° TCH 24′.
AIRPORT REMARKS: Unattended. For svc call 507–375–3627 or 507–375–3222. Fuel avbl 24 hrs with credit card. Ultralight tfc on and invof arpt. ACTIVATE MIRL Rwy 15–33, REIL Rwys 15 and 33, VASI Rwys 15 and 33—CTAF.
WEATHER DATA SOURCES: AWOS–3 260 JYG (507) 375–7105.
COMMUNICATIONS: CTAF: 122.9.
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.75
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE FRM.
FAIRMONT (L) VOR/DME 110.2 FRM Chan 39 N43°38.76′ W94°25.35′ 337° 21.3 NM to fld. 1164/7E.
NDB(MHW) 260 JYG N43°59.13′ W94°33.13′ at fld.
AWOS–3. NOTAM FILE JYG.



LOC I-BPM	APP CRS		
111.9	133°	Rwy Idg	7000
		TDZE	1031
		Apt Elev	1031

ILS or LOC/DME RWY 13

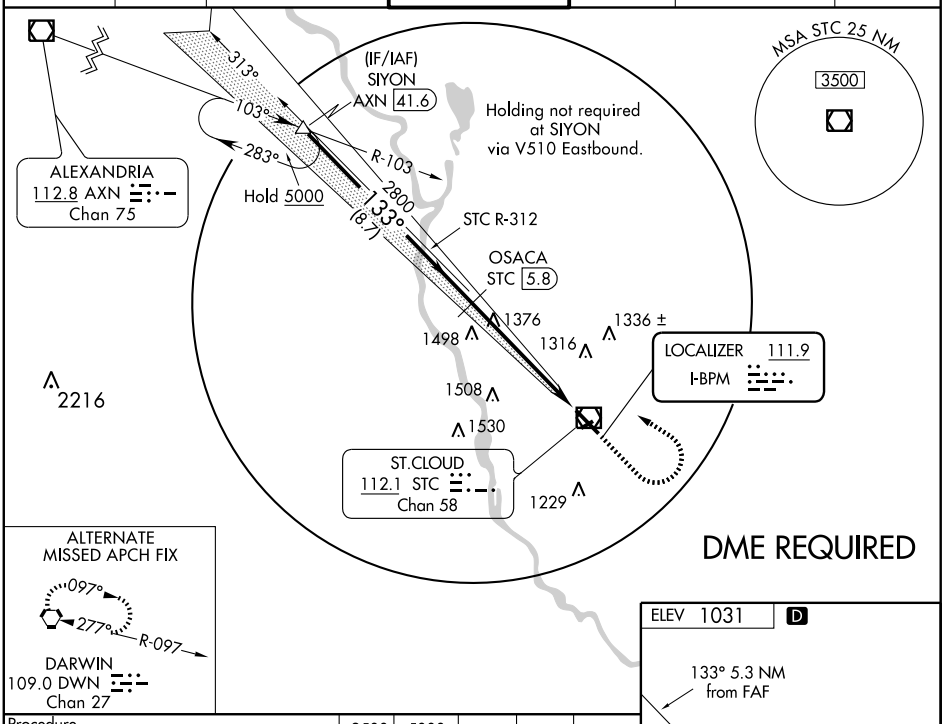
ST. CLOUD RGNL (STC)

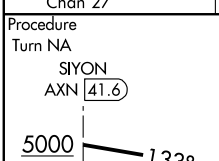
T A Circling to Rwy 5-23 NA at night. DME from STC VOR/DME. Simultaneous reception of I-BPM and STC DME required. DME required. When local altimeter setting not received, use Little Falls altimeter setting and increase DA to 1307 and all MDAs 80 feet. Increase S-LOC 13 Cats C/D and Circling Cats C/D visibility ¼ mile. For inoperative MALSR when using Little Falls altimeter setting, increase S-ILS 13 all Cats visibility ½ mile.

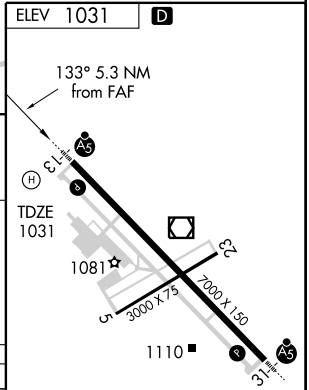
MALSR A5

MISSED APPROACH: Climb to 2500 then climbing left turn to 5000 direct STC VOR/DME and via STC VOR/DME R-312 to SIYON/AXN VOR/DME 41.6 DME and hold.

ATIS	ASOS	MINNEAPOLIS CENTER	ST. CLOUD TOWER ★	GND CON	PRINCETON RADIO	UNICOM
119.375	112.1	121.05 397.9	118.25 (CTAF) L	123.75	122.5	123.75







CATEGORY	A	B	C	D
S-ILS 13	1231-½ 200 (200-½)			
S-LOC 13	1680-½ 649 (700-½)		1680-1¼ 649 (700-1¼)	1680-1½ 649 (700-1½)
CIRCLING	1680-1 649 (700-1)		1680-1¾ 649 (700-1¾)	1680-2 649 (700-2)

MIRL Rwy 5-23 L
HIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC I-STC	APP CRS	Rwy Idg	7000
111.9	313°	TDZE	1019
		Apt Elev	1031

ILS or LOC RWY 31
ST. CLOUD RGNL (STC)

When local altimeter setting not received, use Little Falls altimeter setting and increase all DA 76 feet and all MDA 80 feet.

MALSR

MISSED APPROACH: Climb to 3000, then left turn direct HUSSK LOM and hold.

ATIS	ASOS	MINNEAPOLIS CENTER	ST. CLOUD TOWER ★	GND CON	PRINCETON RADIO	UNICOM
119.375	112.1	121.05 397.9	118.25 (CTAF) L	123.75	122.5	123.75

ADF REQUIRED

LOCALIZER 111.9 I-STC

1498 1336± 1316 1508 1530 1129± MM 1229

3000 135° (5.7)

LOM/IAF HUSSK 342 ST STC 5.7

ST.CLOUD 112.1 STC Chan 58

133° 313° 178° 358° 133°

2800 NoPT 313° (8.5)

2454

SANLY INT STC 14.1

R-300

3500 NoPT 300° (23.8)

MSA ST 25 NM 3500

10 NM

R-049

109.0 DWN Chan 27

IAF GOPHER 117.3 GEP Chan 120

ELEV 1031 D

13 23 31 5 1081 3000 X 75 7000 X 150 1110 TDZE 1019

313° 5 NM from FAF

MIRL Rwy 5-23 L

HIRL Rwy 13-31 L

3000 ST LOM STC 5.7 Remain within 10 NM

133° 313° 3000 2705 2800 STC 0.7 MM

GS 3.00° TCH 60

0.5 4.5 NM

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

CATEGORY	A	B	C	D
S-ILS 31	1219-½ 200 (200-½)			
S-LOC 31	1380-½ 361 (400-½)			1380-¾ 361 (400-¾)
CIRCLING	1500-1 469 (500-1)		1500-1½ 469 (500-1½)	1620-2 590 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	3000
056°	TDZE	1022
	Apt Elev	1031

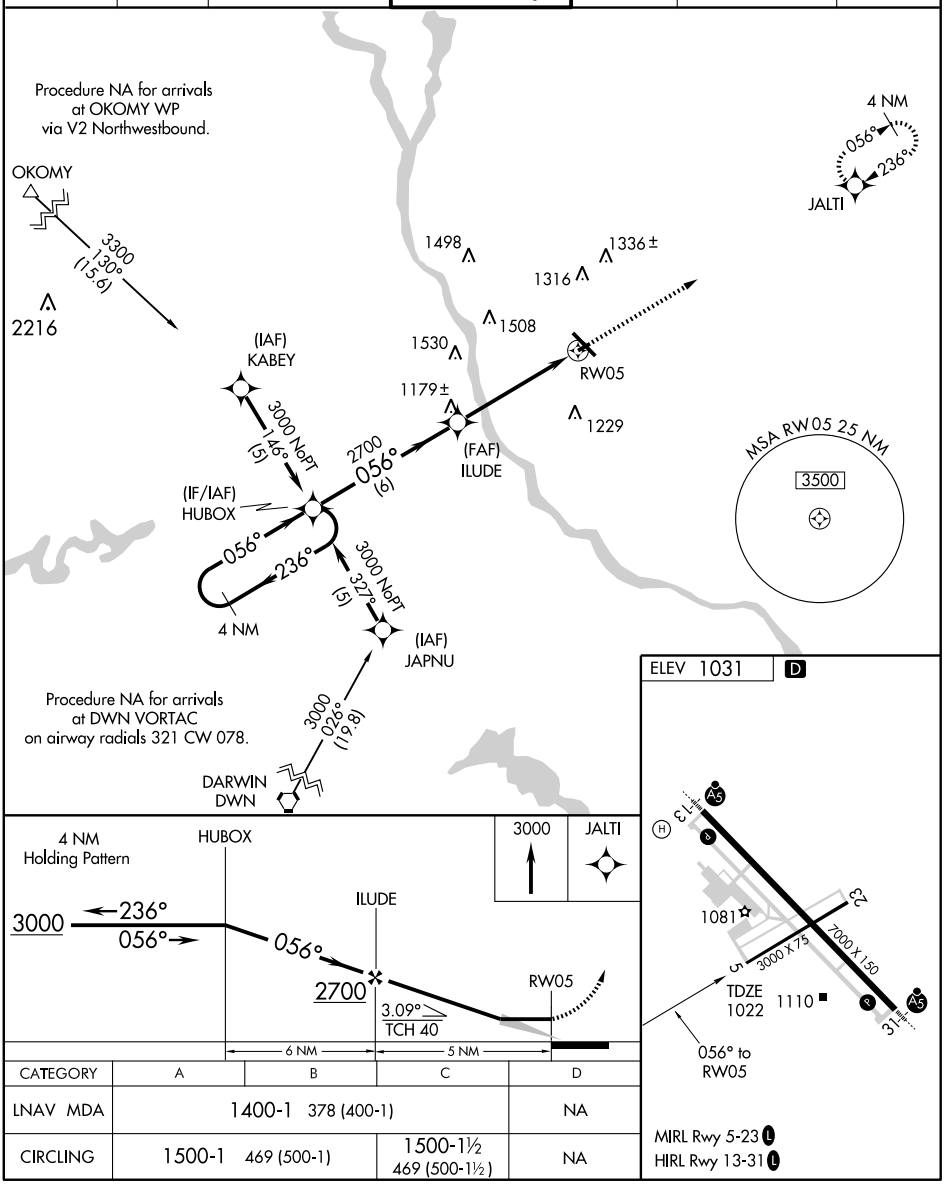
RNAV (GPS) RWY 5

ST. CLOUD RGNL (STC)

When local altimeter setting not received, use Little Falls altimeter setting and increase all MDA 80 feet and LNAV Cat C visibility ¼ mile. Visibility reduction by helicopterrs NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct JALTI WP and hold.

ATIS	ASOS	MINNEAPOLIS CENTER	ST. CLOUD TOWER ★	GND CON	PRINCETON RADIO	UNICOM
119.375	112.1	121.05 397.9	118.25 (CTAF) L	123.75	122.5	123.75



CATEGORY	A	B	C	D
LNAV MDA	1400-1 378 (400-1)			NA
CIRCLING	1500-1 469 (500-1)		1500-1½ 469 (500-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 13

ST. CLOUD RGNL (STC)

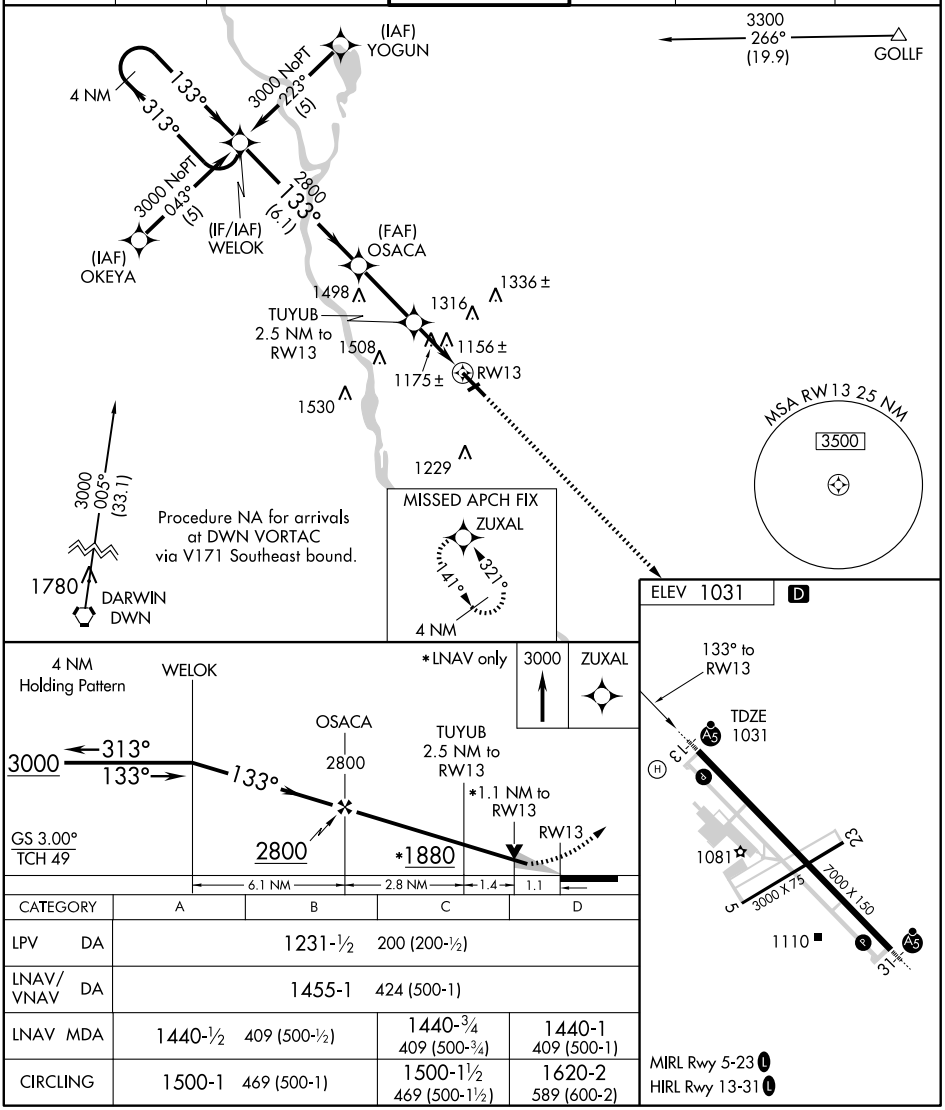
WAAS	APP CRS	Rwy Idg	7000
CH 82013	133°	TDZE	1031
W13A		Apt Elev	1031

T A For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Little Falls altimeter setting. When local altimeter setting not received, use Little Falls altimeter setting and increase all DA 76 feet and all MDA 80 feet. Increase LNAV/ VNAV visibility ¼ mile all Cats. Circling to Rwy 5-23 NA at night. For inoperative MALSR, increase LNAV Cat D visibility ¼ mile. For inoperative MALSR when using Little Falls altimeter setting, increase LPV all Cats visibility ½ mile.

MALSR

MISSED APPROACH: Climb to 3000 direct ZUXAL and hold.

ATIS	ASOS	MINNEAPOLIS CENTER	ST. CLOUD TOWER *	GND CON	PRINCETON RADIO	UNICOM
119.375	112.1	121.05 397.9	118.25 (CTAF) L	123.75	122.5	123.75



CATEGORY	A	B	C	D
LPV DA	1231-½ 200 (200-½)			
LNAV/ VNAV DA	1455-1 424 (500-1)			
LNAV MDA	1440-½ 409 (500-½)		1440-¾ 409 (500-¾)	1440-1 409 (500-1)
CIRCLING	1500-1 469 (500-1)		1500-1½ 469 (500-1½)	1620-2 589 (600-2)

MIRL Rwy 5-23 L
HIRL Rwy 13-31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 23

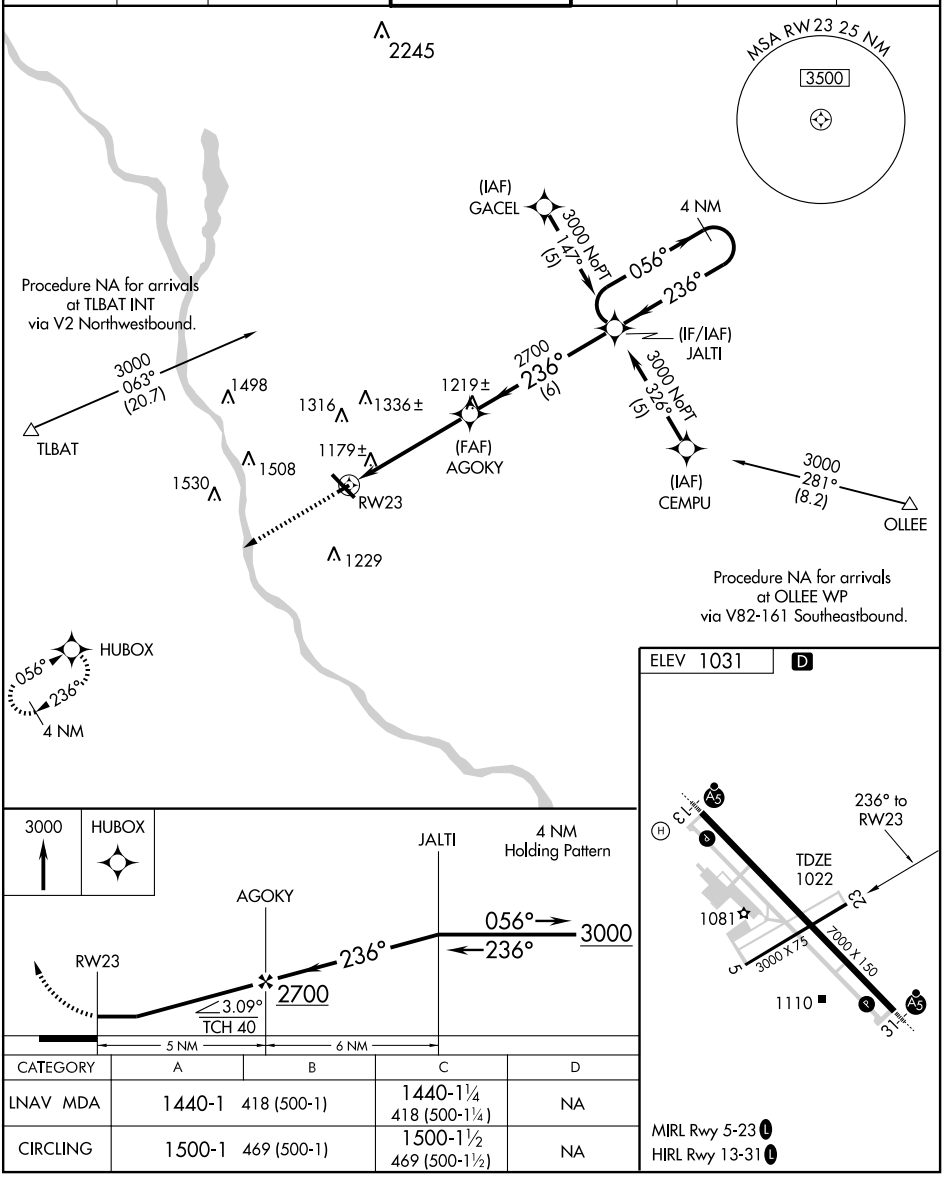
ST. CLOUD RGNL (STC)

APP CRS	Rwy Idg	3000
236°	TDZE	1022
	Apt Elev	1031

When local altimeter setting not received, use Little Falls altimeter setting and increase all MDA 80 feet and LNAV Cat C visibility ¼ mile.
Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct HUBOX WP and hold.

ATIS	ASOS	MINNEAPOLIS CENTER	ST. CLOUD TOWER ★	GND CON	PRINCETON RADIO	UNICOM
119.375	112.1	121.05 397.9	118.25 (CTAF) L	123.75	122.5	123.75



CATEGORY	A	B	C	D
LNAV MDA	1440-1	418 (500-1)	1440-1¼ 418 (500-1¼)	NA
CIRCLING	1500-1	469 (500-1)	1500-1½ 469 (500-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	7000
CH 61213	313°	TDZE	1020
W31A		Apt Elev	1031

RNAV (GPS) RWY 31

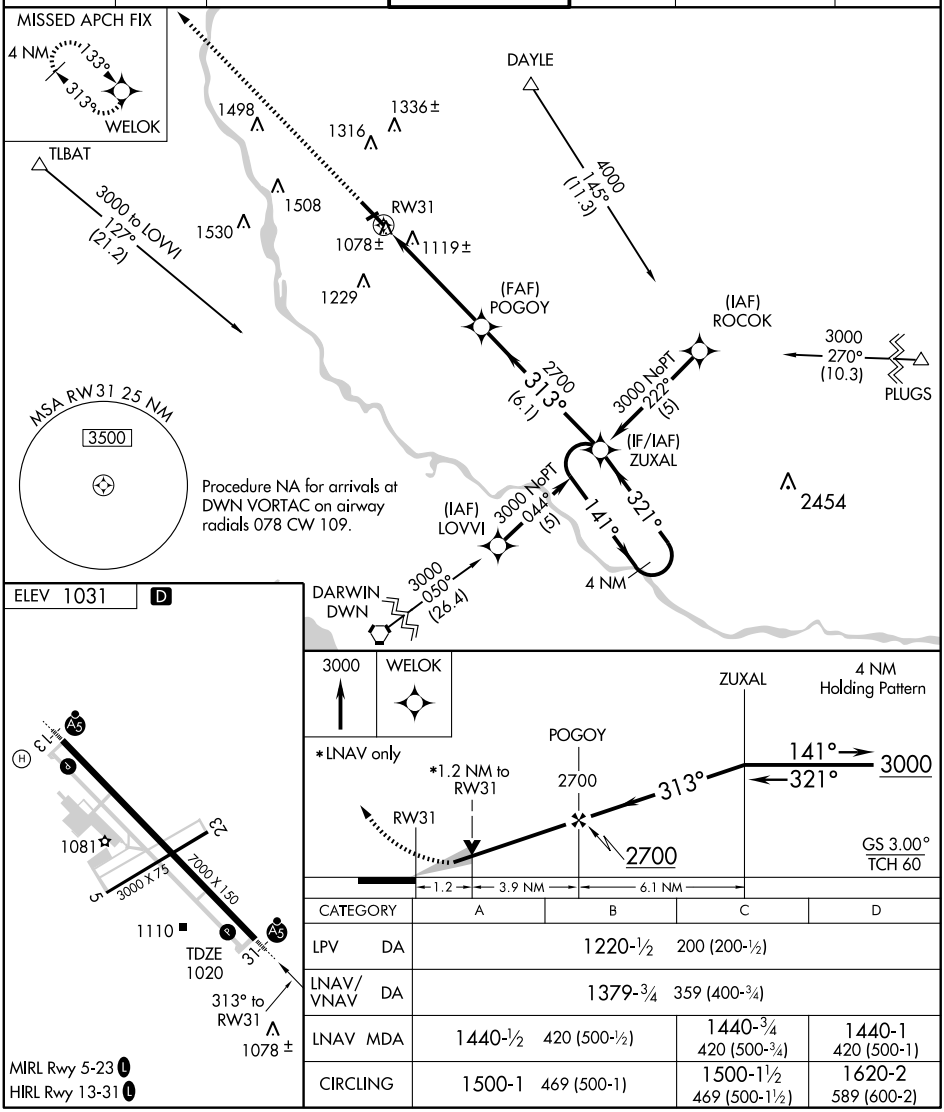
ST. CLOUD RGNL (STC)

T DME/DME RNP-0.3 NA. Circling to Rwy 5-23 NA at night. For uncompensated A Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). When local altimeter setting not received, use Little Falls altimeter setting and increase all DA 76 feet and all MDA 80 feet. Increase LNAV/ VNAV visibility ¼ mile all Cats. For inoperative MALSR, increase LNAV Cat D visibility ¼ mile. For inoperative MALSR when using Little Falls altimeter, increase LPV all Cats visibility ½ mile. Baro-VNAV and VDP NA when using Little Falls altimeter setting.

MALSR

MISSED APPROACH: Climb to 3000 direct WELOK and hold.

ATIS	ASOS	MINNEAPOLIS CENTER	ST. CLOUD TOWER ★	GND CON	PRINCETON RADIO	UNICOM
119.375	112.1	121.05 397.9	118.25 (CTAF) L	123.75	122.5	123.75



CATEGORY		A	B	C	D
LPV	DA	1220-½ 200 (200-½)			
LNAV/ VNAV	DA	1379-¾ 359 (400-¾)			
LNAV	MDA	1440-½ 420 (500-½)		1440-¾ 420 (500-¾)	1440-1 420 (500-1)
CIRCLING		1500-1 469 (500-1)		1500-1½ 469 (500-1½)	1620-2 589 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME STC	APP CRS	Rwy Idg	7000
112.1	126°	TDZE	1031
Chan 58		Apt Elev	1031

VOR/DME RWY 13

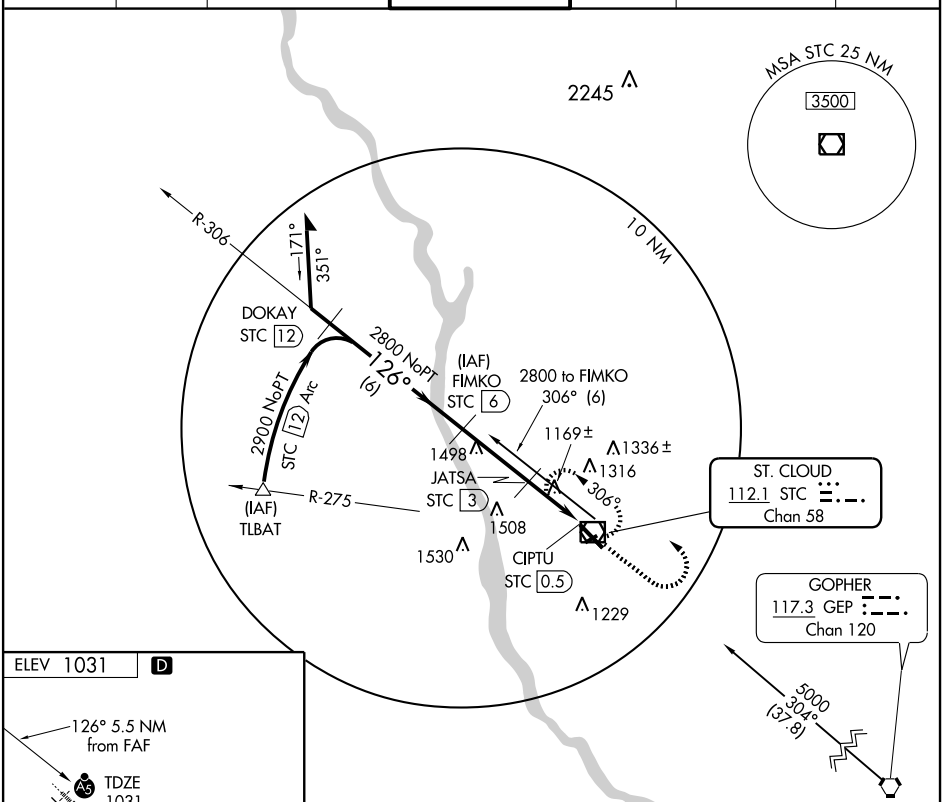
ST. CLOUD RGNL (STC)

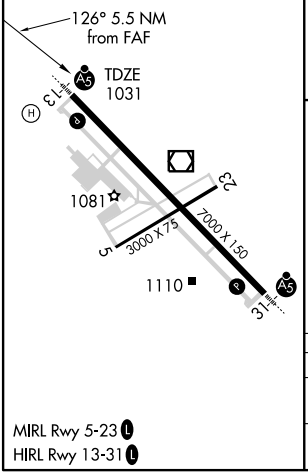
T For inoperative MALSR, increase Cat D visibility to 1¼. When A local altimeter setting not received, use Little Falls altimeter setting and increase all MDA 80 feet.

MALSR

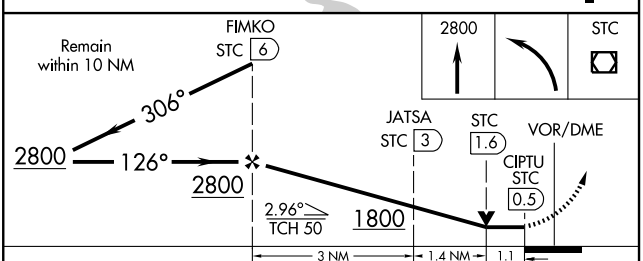
MISSED APPROACH: Climb to 2800, then left turn direct STC VOR/DME and hold.

ATIS	ASOS	MINNEAPOLIS CENTER	ST. CLOUD TOWER ★	GND CON	PRINCETON RADIO	UNICOM
119.375	112.1	121.05 397.9	118.25 (CTAF) L	123.75	122.5	123.75





MIRL Rwy 5-23 L
HIRL Rwy 13-31 L



CATEGORY	A	B	C	D
S-13	1440-½	409 (500-½)	1440-¾ 409 (500-¾)	1440-1 409 (500-1)
CIRCLING	1500-1	469 (500-1)	1500-1½ 469 (500-1½)	1620-2 590 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME STC	APP CRS	Rwy Idg	7000
112.1	320°	TDZE	1019
Chan 58		Apt Elev	1031

VOR RWY 31

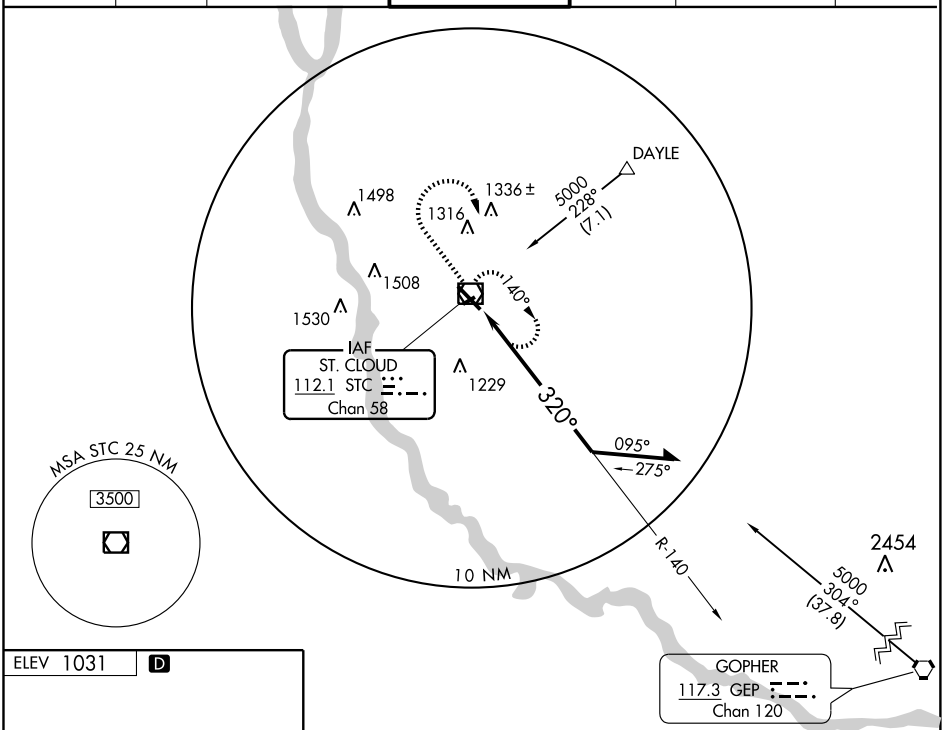
ST. CLOUD RGNL (STC)

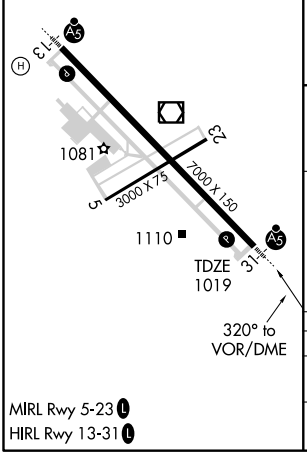
For inoperative MALSR, increase Cat D visibility to 1¼. When local altimeter setting not received, use Little Falls altimeter setting and increase all MDA 80 feet.

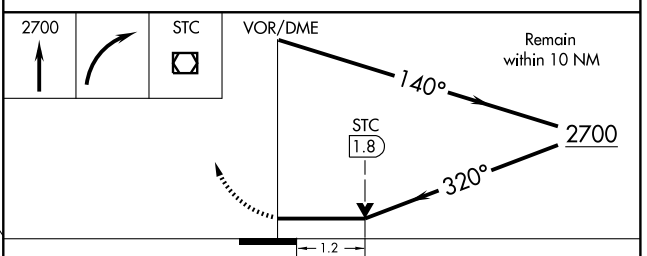
MALSR

MISSED APPROACH: Climb to 2700, then right turn direct STC VOR/DME and hold.

ATIS	ASOS	MINNEAPOLIS CENTER	ST. CLOUD TOWER ★	GND CON	PRINCETON RADIO	UNICOM
119.375	112.1	121.05 397.9	118.25 (CTAF) L	123.75	122.5	123.75







CATEGORY	A	B	C	D
S-31	1440-½	421 (500-½)	1440-¾ 421 (500-¾)	1440-1 421 (500-1)
CIRCLING	1500-1	469 (500-1)	1500-1½ 469 (500-1½)	1620-2 590 (600-2)

MIRL Rwy 5-23 L
HIRL Rwy 13-31 L

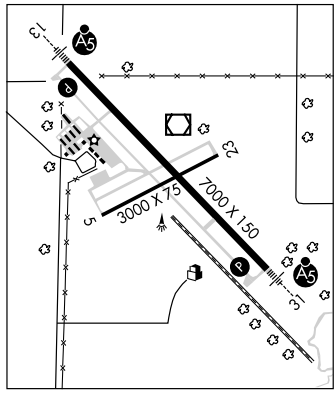
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ST CLOUD RGNL (STC) 4 E UTC−6(−5DT) N45°32.79′ W94°03.59′ **TWIN CITIES**
1031 B S4 **FUEL** 100LL, JET A OX 1 TPA—1831(800) Class I, ARFF Index A **H–2J, L–14H**
NOTAM FILE STC **IAP, AD**

RWY 13–31: H7000X150 (CONC–GRVD) S–75, D–175, 2S–175, 2D–280 HIRL
RWY 13: MALSR. PAPI(P4R). TCH 50′.
RWY 31: MALSR. PAPI(P4L). TCH 50′.
RWY 05–23: H3000X75 (ASPH–PFC) S–50, D–75, 2S–95 MIRL
RWY 05: Tree. **RWY 23:** Trees.

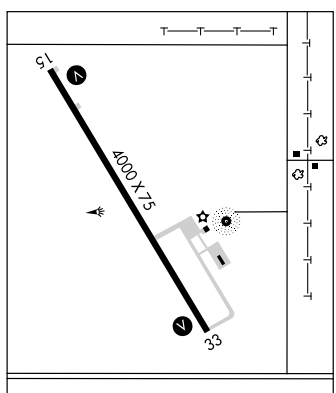
RUNWAY DECLARED DISTANCE INFORMATION

RWY 05:	TORA–3000	TODA–3000	ASDA–3000	LDA–3000
RWY 13:	TORA–7000	TODA–7000	ASDA–7000	LDA–7000
RWY 23:	TORA–3000	TODA–3000	ASDA–3000	LDA–3000
RWY 31:	TORA–7000	TODA–7000	ASDA–7000	LDA–7000



AIRPORT REMARKS: Attended 1100–0530Z‡. Deer, migratory waterfowl and other wildlife on and invof arpt. Crop dusting operations on invof arpt during summer months. Line of sight visibility is restricted from the Rwy 13 and 23 approach and Rwy 13 and 05 approach. Helipad not visible from ATCT and approach surfaces. 24 hrs PPR for unscheduled air carrier ops with more than 30 passenger seats call arpt manager 320–255–3251. Flight training on and invof arpt. Rwy 05–23 not avbl for air carrier ops utilizing acft with more than 9 passenger seats. Rwy 31 calm wind rwy. Rwy 13–31 200′ blast pad each end. HIRL Rwy 13–31 and MIRL Rwy 05–23 preset on low ints, to increase ints and ACTIVATE PAPI Rwy 13 and Rwy 31, and MALSR Rwy 13 and Rwy 31—CTAF.
WEATHER DATA SOURCES: ASOS 112.1 STC (320) 240–8781.
COMMUNICATIONS: CTAF 118.25 **ATIS** 119.375 **UNICOM** 123.75
RCO 122.5 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 121.05
ST CLOUD TOWER 118.25 (1300–0500Z‡) **GND CON** 123.75
AIRSPACE: CLASS D svc 1300–0500Z‡ other times CLASS E.
RADIO AIDS TO NAVIGATION: NOTAM FILE STC.
(T) VORW/DME 112.1 STC Chan 58 N45°32.96′ W94°03.52′ at fld. 1023/3E. **ASOS.** VOR unmonitored.
HUSSK NDB (LOM) 342 ST N45°28.74′ W93°58.12′ 314° 5.6 NM to fld.
ILS 111.9 I–STC Rwy 31. Class IC. LOM HUSSK NDB.
ILS 111.9 I–BPM Rwy 13. Class IT.

ST JAMES MUNI (JYG) 3E UTC−6(−5DT) N43°59.18′ W94°33.48′ **OMAHA**
1067 B **FUEL** 100LL NOTAM FILE JYG **L–12I**
RWY 15–33: H4000X75 (ASPH) MIRL **IAP**
RWY 15: REIL. VASI(V2L)—GA 3.0° TCH 24′.
RWY 33: REIL. VASI(V2L)—GA 3.0° TCH 24′.
AIRPORT REMARKS: Unattended. For svc call 507–375–3627 or 507–375–3222. Fuel avbl 24 hrs with credit card. Ultralight tfc on and invof arpt. ACTIVATE MIRL Rwy 15–33, REIL Rwys 15 and 33, VASI Rwys 15 and 33—CTAF.
WEATHER DATA SOURCES: AWOS–3 260 JYG (507) 375–7105.
COMMUNICATIONS: CTAF: 122.9.
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.75
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE FRM.
FAIRMONT (L) VOR/DME 110.2 FRM Chan 39 N43°38.76′ W94°25.35′ 337° 21.3 NM to fld. 1164/7E.
NDB(MHW) 260 JYG N43°59.13′ W94°33.13′ at fld.
AWOS–3. NOTAM FILE JYG.



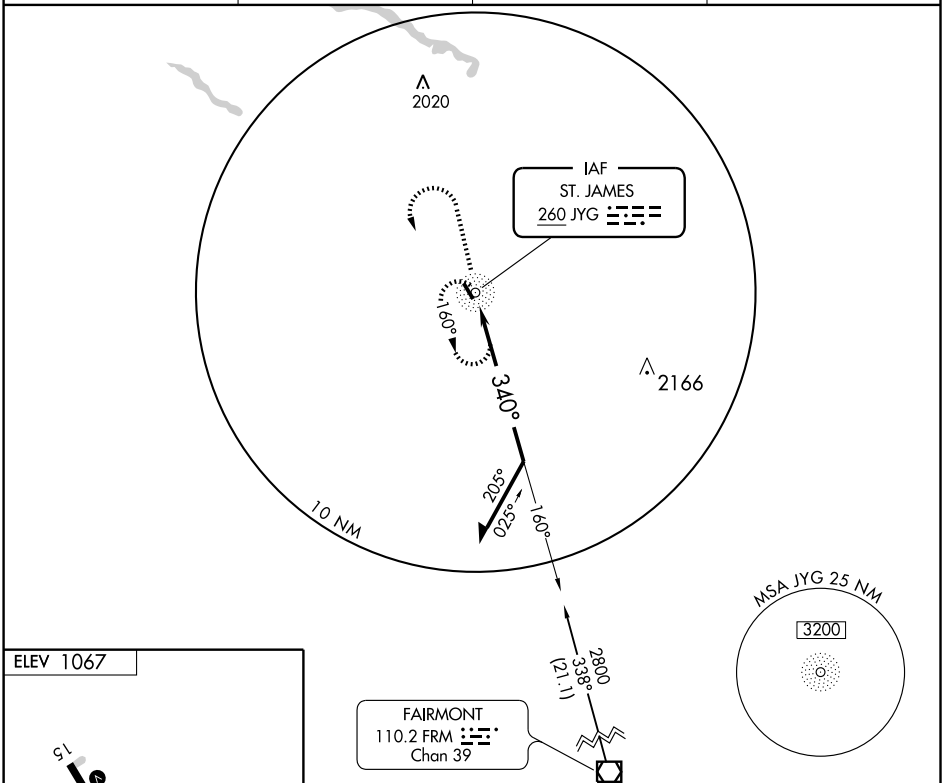
NDB JYG 260	APP CRS 340°	Rwy Idg 4000 TDZE 1067 Apt Elev 1067

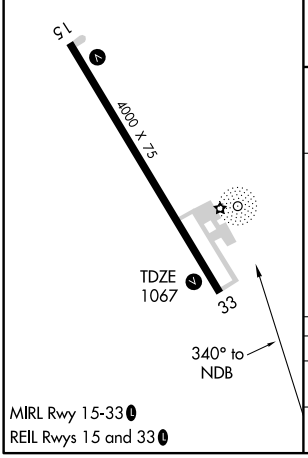
NDB RWY 33
ST. JAMES MUNI (JYG)

NA

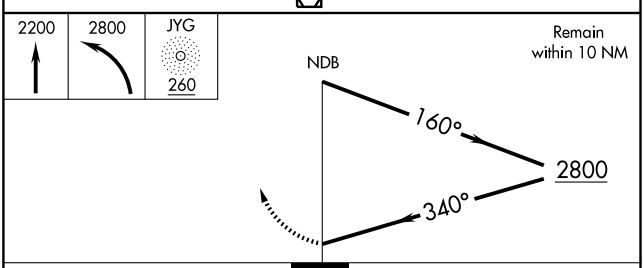
MISSED APPROACH: Climb to 2200 then climbing left turn to 2800 direct JYG NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
260	127.75 257.7	121.725	122.9 L





MIRL Rwy 15-33 L
REIL Rwys 15 and 33 L



CATEGORY	A	B	C	D
S-33	1620-1	553 (600-1)	NA	
CIRCLING	1620-1	553 (600-1)	NA	

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

AL-9192 (FAA)

RNAV (GPS) RWY 15

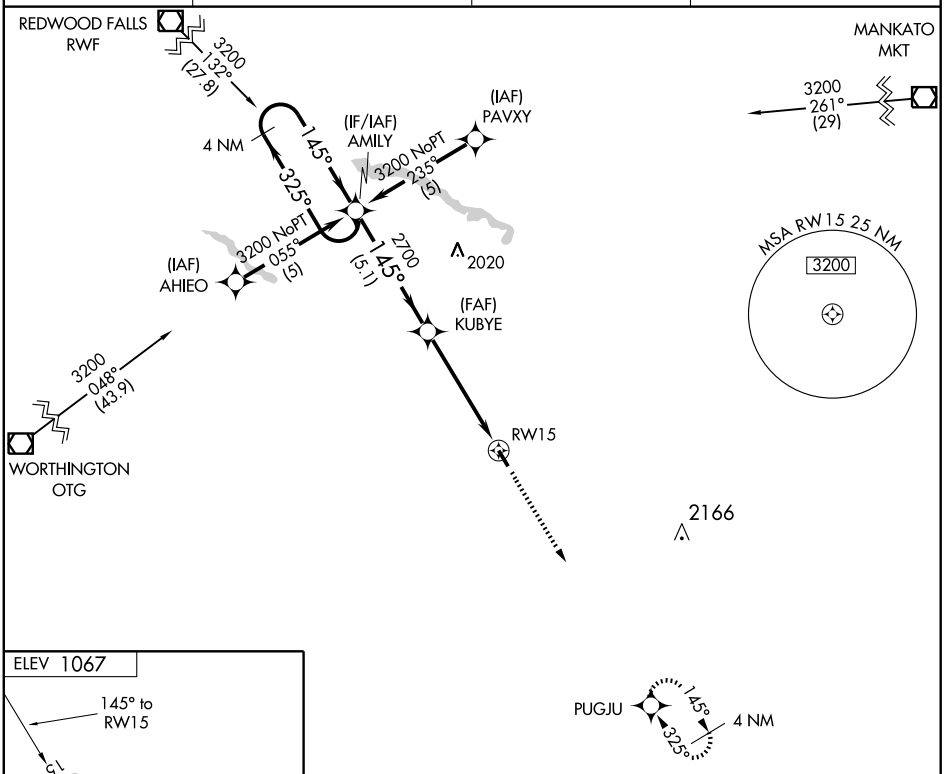
ST. JAMES MUNI (JYG)

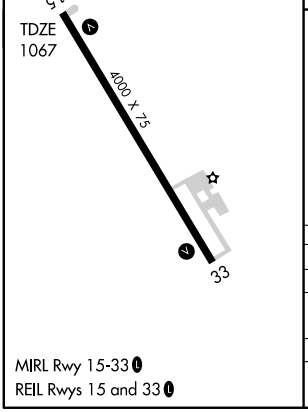
APP CRS	Rwy Idg	4000
145°	TDZE	1067
	Apt Elev	1067

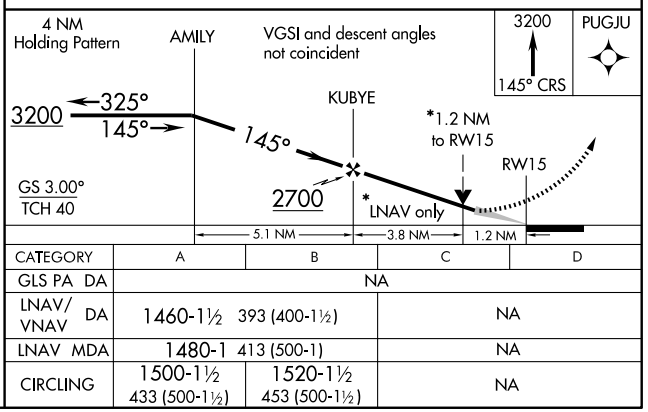
Baro-VNAV not authorized below -17°C (1°F).
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 3200 via 145° course to PUGJU WP and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
260	127.75 257.7	121.725	122.9 L







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	1460-1½ 393 (400-1½)		NA	
LNAV MDA	1480-1 413 (500-1)		NA	
CIRCLING	1500-1½ 433 (500-1½)	1520-1½ 453 (500-1½)	NA	

43° 59′ N - 94° 33′ W

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy ldg	4000
325°	TDZE	1066
	Apt Elev	1067

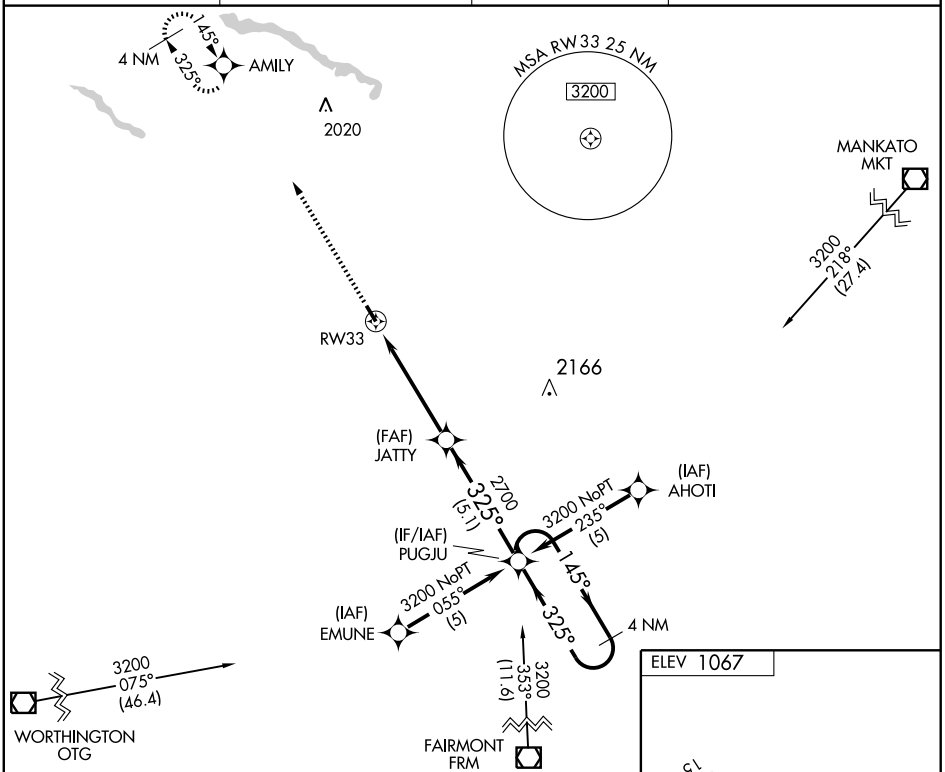
RNAV (GPS) RWY 33

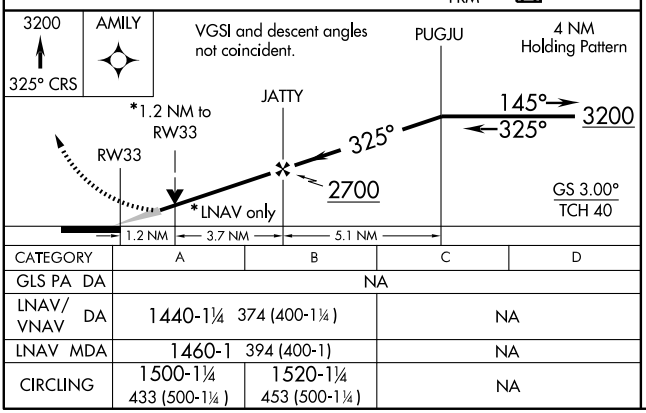
ST. JAMES MUNI (JYG)

Baro-VNAV not authorized below -17°C (1°F).
NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

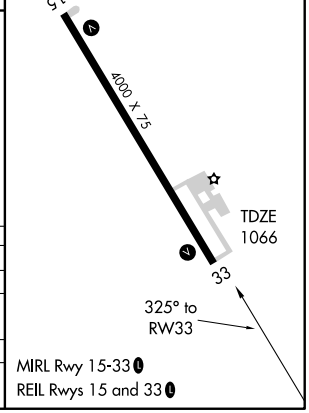
MISSED APPROACH: Climb to 3200 via 325° course to AMILY WP and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
260	127.75 257.7	121.725	122.9 L





CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	1440-1¼ 374 (400-1¼)		NA	
LNAV MDA	1460-1 394 (400-1)		NA	
CIRCLING	1500-1¼ 433 (500-1¼)	1520-1¼ 453 (500-1¼)	NA	

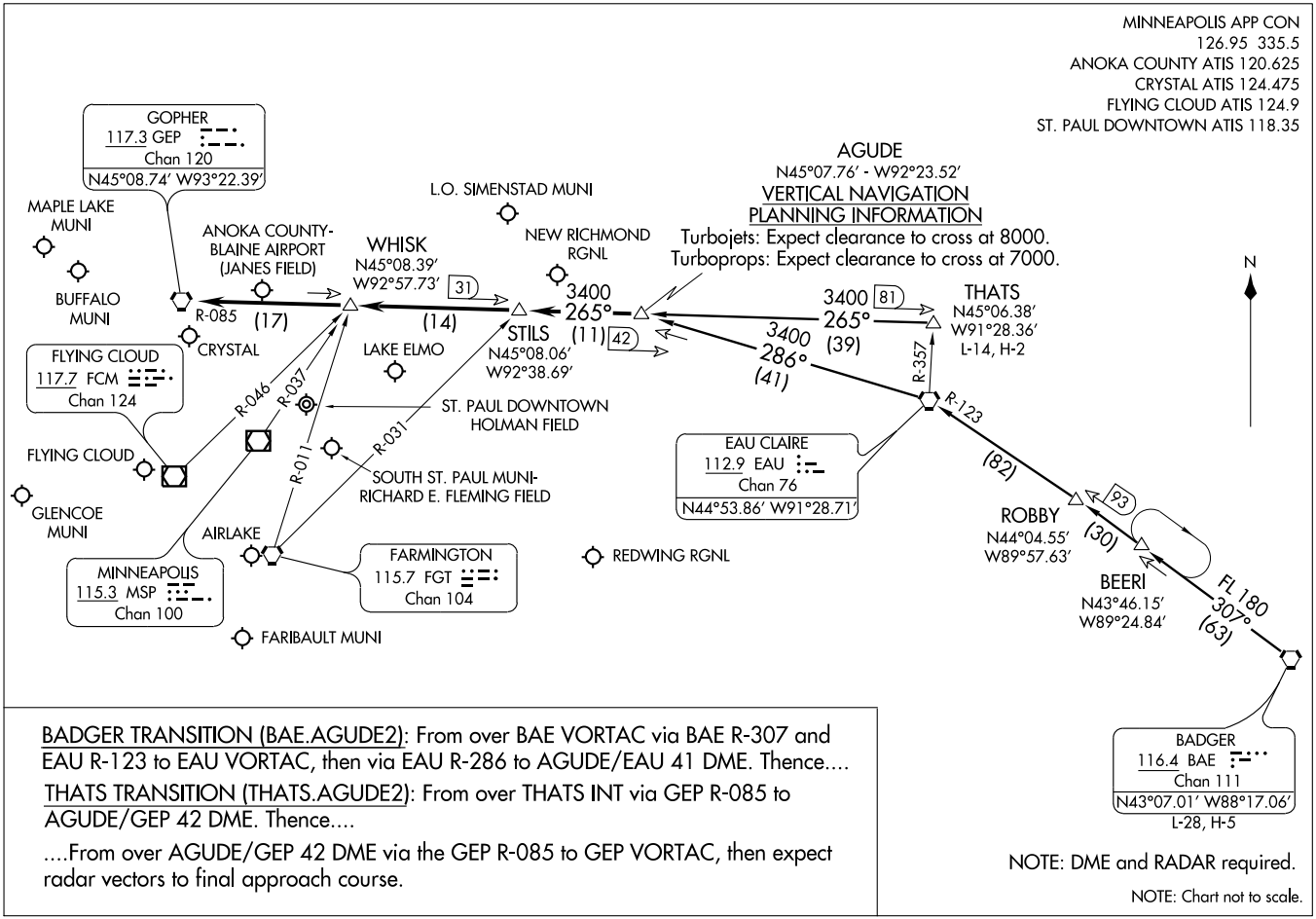


NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

AGUDE TWO ARRIVAL

(AGUDE.AGUDE2) 10154

MINNEAPOLIS-ST. PAUL, MINNESOTA



BADGER TRANSITION (BAE.AGUDE2): From over BAE VORTAC via BAE R-307 and EAU R-123 to EAU VORTAC, then via EAU R-286 to AGUDE/EAU 41 DME. Thence....

THATS TRANSITION (THATS.AGUDE2): From over THATS INT via GEP R-085 to AGUDE/GEP 42 DME. Thence....

....From over AGUDE/GEP 42 DME via the GEP R-085 to GEP VORTAC, then expect radar vectors to final approach course.

NOTE: DME and RADAR required.

NOTE: Chart not to scale.

(AGUDE.AGUDE2) 10154

AGUDE TWO ARRIVAL

ST-263 (FAA)

MINNEAPOLIS-ST. PAUL, MINNESOTA

ST PAUL

LAKE ELMO (21D) 9 E UTC−6(−5DT) N44°59.85′ W92°51.34′

933 B S4 **FUEL** 100LL TPA—1933(1000) NOTAM FILE 21D

RWY 14–32: H2850X75 (ASPH) S–11 MIRL

RWY 14: REIL. P–line.

RWY 32: REIL. PAPI(P4R)—GA 3.0° TCH 26′. Road.

RWY 04–22: H2497X75 (ASPH) S–13 0.4% up NE

RWY 04: Tree. **RWY 22:** Trees.

AIRPORT REMARKS: Attended 1300–0000Z‡. Self svc fuel avbl 24 hr with credit card. Ultralight tfc prohibited. ACTIVATE REIL Rwy 14, Rwy 32 and PAPI Rwy 32—CTAF.

WEATHER DATA SOURCES: AWOS–3 120.075 (651) 779–5949.

COMMUNICATIONS: CTAF/UNICOM 122.8

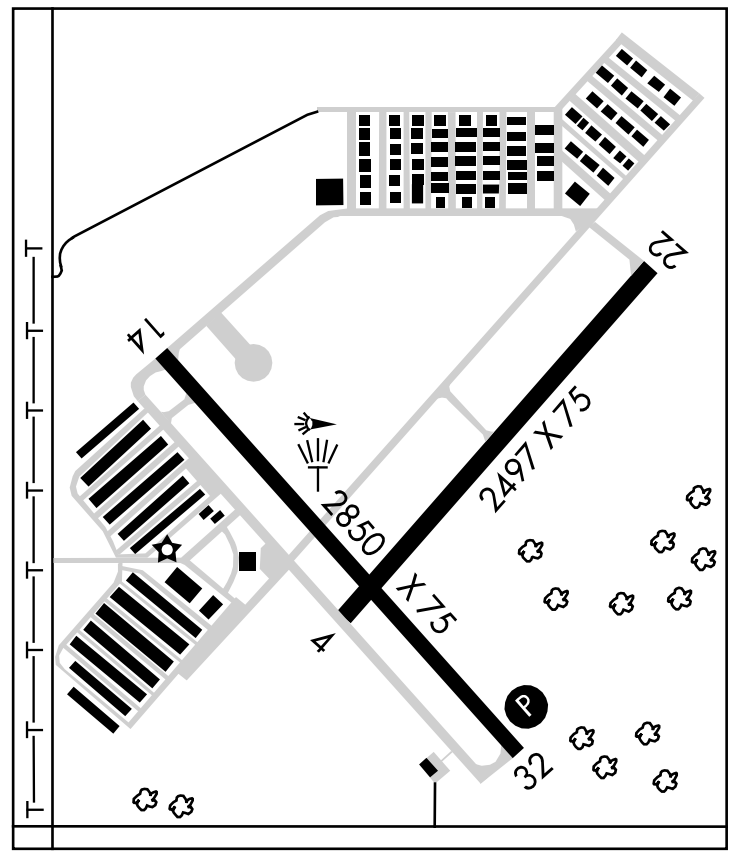
Ⓡ **MINNEAPOLIS APP/DEP CON** 121.2

MINNEAPOLIS CLNC DEL 118.625

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

GOPHER (H) VORTACW 117.3 GEP Chan 120 N45°08.74′ W93°22.39′ 106° 23.7 NM to fld. 877/6E. **HIWAS.**

HOPEY NDB (MHW) 400 PPI N44°52.40′ W92°56.53′ 023° 8.3 NM to fld. NOTAM FILE STP.



GREEN BAY
L–12J, 14I, A
IAP

NDB PPI	APP CRS	Rwy Idg	2497
400	023°	TDZE	932
		Apt Elev	932

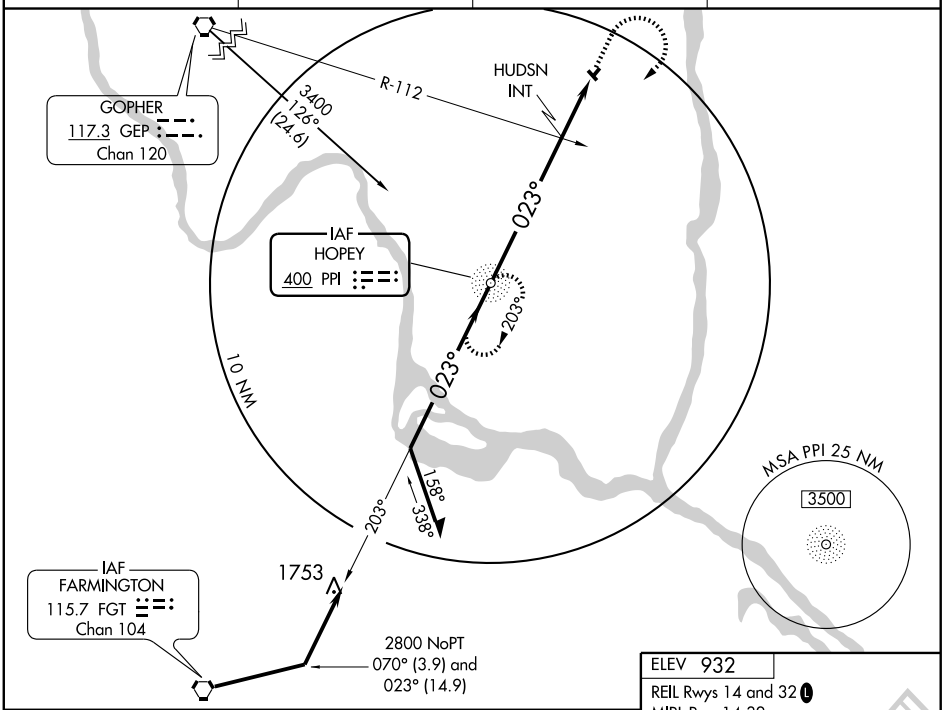
NDB RWY 4

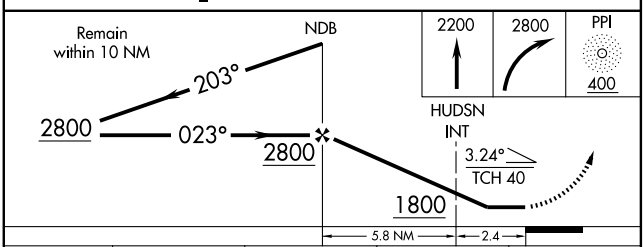
ST. PAUL/LAKE ELMO (21D)

When local altimeter setting not received, use St. Paul Downtown Holman Field altimeter setting. Straight-in minimums NA at night.

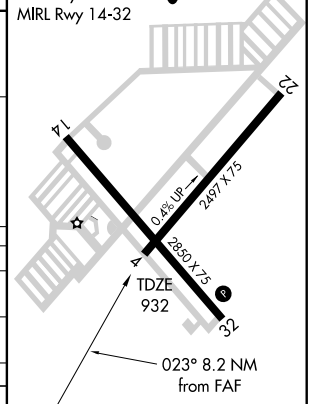
MISSED APPROACH: Climb to 2200 then climbing right turn to 2800 direct PPI NDB and hold.

AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
120.075	121.2	118.625	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-4	1800-1 868 (900-1)	1800-1¼ 868 (900-1¼)	1800-2½ 868 (900-2½)	NA
CIRCLING	1800-1 868 (900-1)	1800-1¼ 868 (900-1¼)	1800-2½ 868 (900-2½)	NA
HUDSN FIX MINIMUMS				
S-4	1520-1 588 (600-1)		1520-1½ 588 (600-1½)	NA
CIRCLING	1520-1 588 (600-1)	1540-1 608 (700-1)	1540-1¾ 608 (700-1¾)	NA



FAF to MAP 8.2 NM					
Knots	60	90	120	150	180
Min:Sec	8:12	5:28	4:06	3:17	2:44

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 32

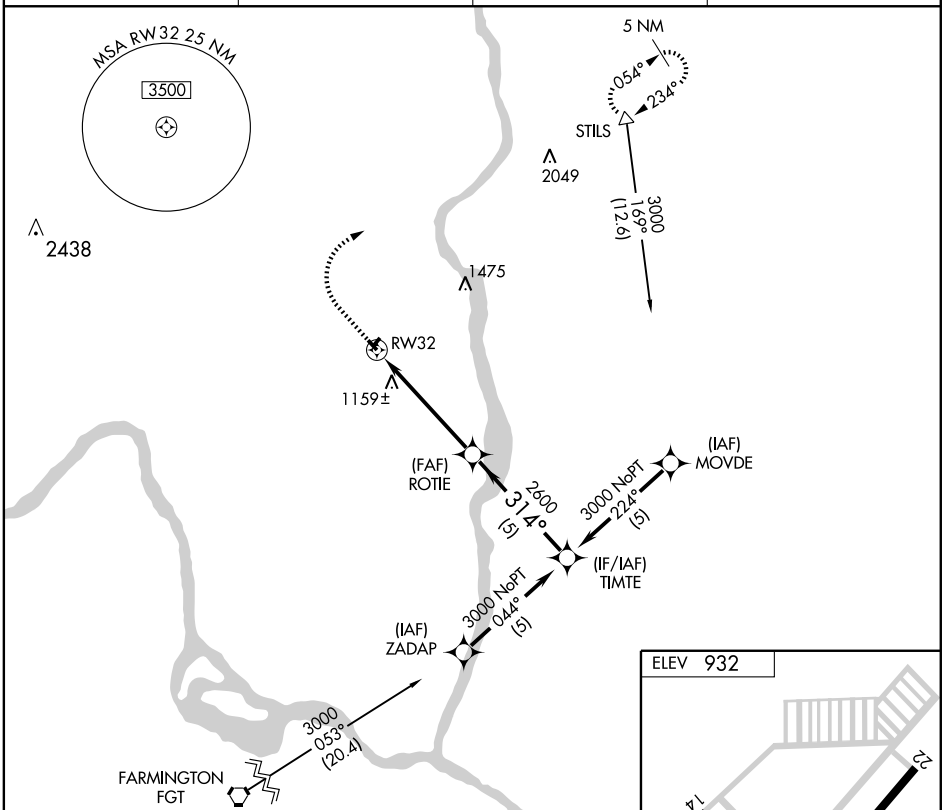
ST. PAUL/LAKE ELMO (21D)

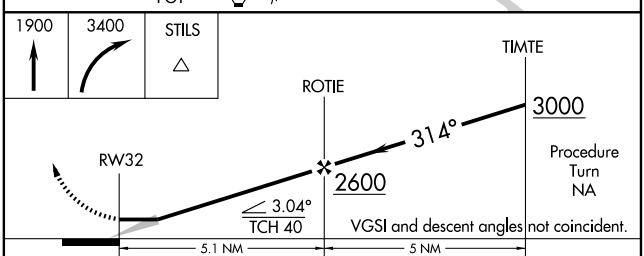
APP CRS	Rwy Idg	2850
314°	TDZE	926
	Apt Elev	932

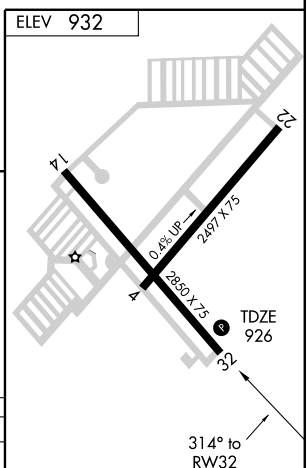
DME/DME RNP- 0.3 NA.
When local altimeter setting not received, use St. Paul Downtown Holman Field altimeter setting.

MISSED APPROACH: Climb to 1900 then climbing right turn to 3400 direct STILS WP and hold.

AWOS-3	MINNEAPOLIS APP CON	CLNC DEL	UNICOM
120.075	121.2	118.625	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1480-1 554 (600-1)		1480-1½ 554 (600-1½)	NA
CIRCLING	1500-1 568 (600-1)	1540-1 608 (700-1)	1540-1¾ 608 (700-1¾)	NA

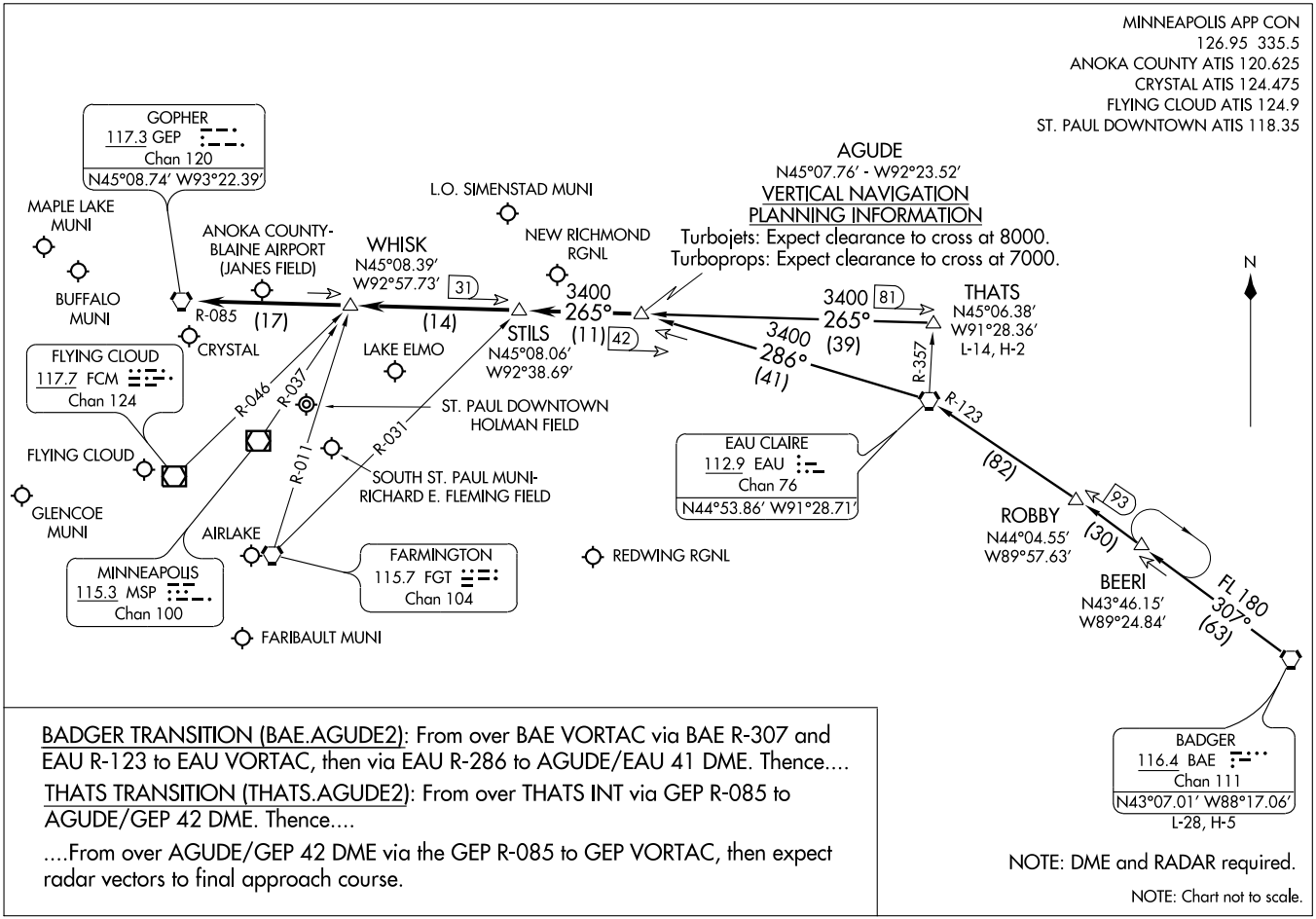
REIL Rwys 14 and 32 L
MIRL Rwy 14-32

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

AGUDE TWO ARRIVAL

(AGUDE.AGUDE2) 10154

MINNEAPOLIS-ST. PAUL, MINNESOTA



BADGER TRANSITION (BAE.AGUDE2): From over BAE VORTAC via BAE R-307 and EAU R-123 to EAU VORTAC, then via EAU R-286 to AGUDE/EAU 41 DME. Thence....

THATS TRANSITION (THATS.AGUDE2): From over THATS INT via GEP R-085 to AGUDE/GEP 42 DME. Thence....

....From over AGUDE/GEP 42 DME via the GEP R-085 to GEP VORTAC, then expect radar vectors to final approach course.

NOTE: DME and RADAR required.

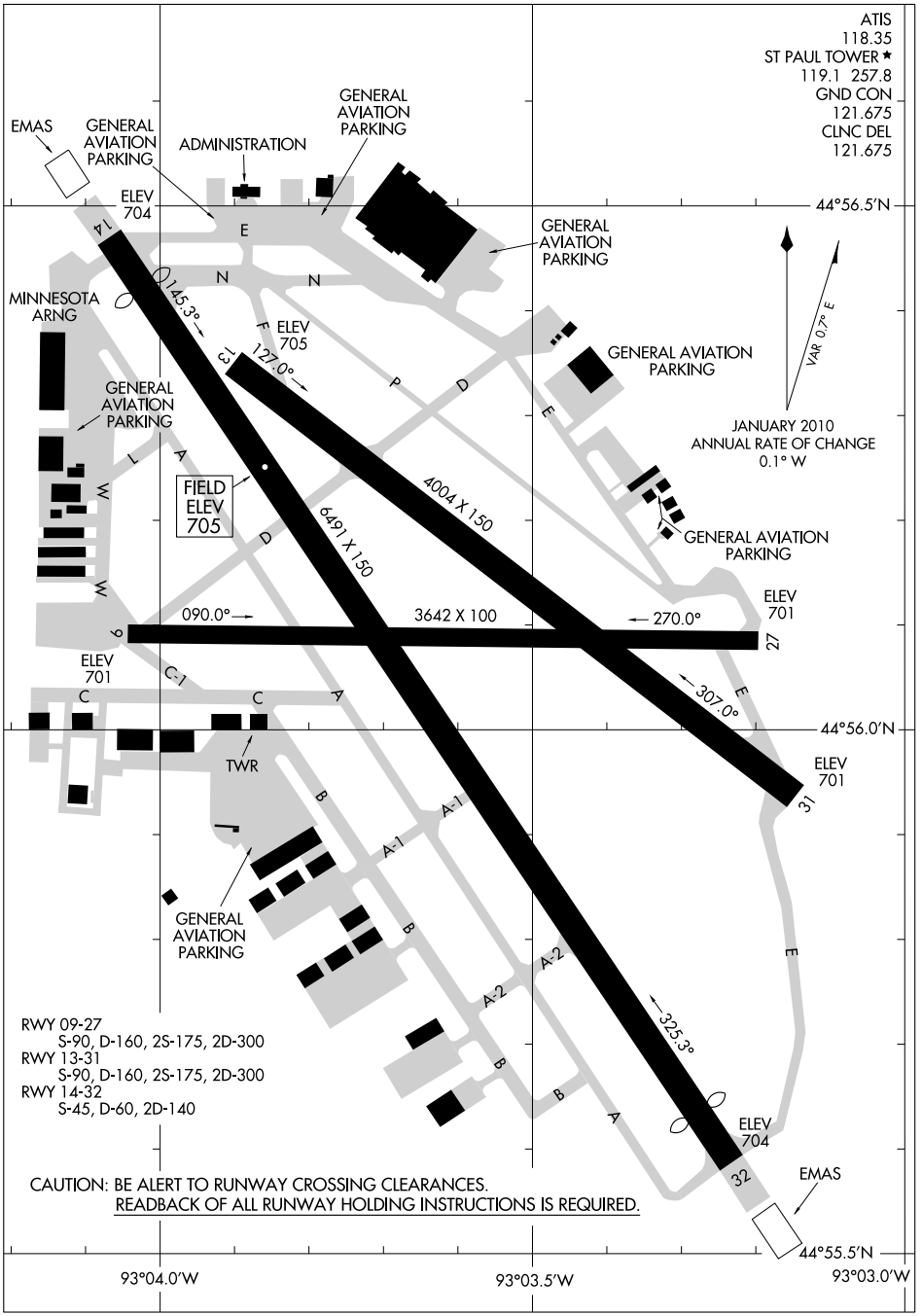
NOTE: Chart not to scale.

(AGUDE.AGUDE2) 10154

AGUDE TWO ARRIVAL

ST-263 (FAA)

MINNEAPOLIS-ST. PAUL, MINNESOTA



NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

ST PAUL DOWNTOWN HOLMAN FLD (STP) 1 S UTC−6(−5DT) N44°56.08′ W93°03.62′ **TWIN CITIES**
705 B S4 **FUEL** 100LL, JET A OX 1 TPA—1905(1200) LRA NOTAM FILE STP **H–2J, L–12J, 14I, A**
IAP, AD

RWY 14–32: H6491X150 (ASPH–GRVD) S–45, D–60, 2D–140 HIRL

RWY 14: MALSR. PAPI(P4R)—GA 3.0° TCH 42′. Thld dsplcd 343′. Tree.

RWY 32: REIL. PAPI(P4L)—GA 3.0° TCH 39′. Thld dsplcd 382′. Trees.

RWY 13–31: H4004X150 (ASPH) S–90, D–160, 2S–175, 2D–300 HIRL

RWY 13: PAPI(P4L)—GA 3.0° TCH 40′. Tree.

RWY 31: REIL. PAPI(P4L)—GA 3.0° TCH 45′. Stack.

RWY 09–27: H3642X100 (ASPH) S–90, D–160, 2S–175, 2D–300 MIRL

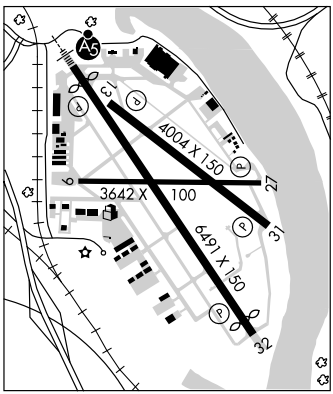
RWY 09: Trees.

RWY 27: PAPI(P4R)—GA 4.0° TCH 40′. Trees. Rgt tfc.

ARRESTING GEAR/SYSTEM

RWY 14: EMAS

RWY 32: EMAS



AIRPORT REMARKS: Attended continuously. Arpt CLOSED to acft over 100,000 lbs. Deer and birds on and invof arpt. Complex airport geometry. Verify correct compass heading prior to departure. For noise abatement procedures call 612–725–6327. Aircraft please follow voluntary noise abatement procedures as published. Rwy 14 runway visual range avbl touchdown, rollout. Rwy 32 runway visual range avbl touchdown, rollout. When using Rwy 27 or Rwy 31, hazardous river tfc may exist. SE arrivals and departures avoid tfc pattern ops at South St. Paul arpt 164° 5 NM at and blo 1720′MSL. Twy A clsd between A2 and approach end of Rwy 32 except for wingspan less than 101′. Twy B clsd between MN jet ramp and Twy A (southern corner) except for wingspan less than 72′ due to flood wall obstacle. Rwy 13 PAPI unusable byd 4° right of course and inside .5 NM. Rotating bcn OTS indef. Second rotating bcn located 2000′ SW of Rwy 14 110′AGL. When twr clsd to increase ints ACTIVATE HIRL Rwy 14–32 and MALSR Rwy 14—CTAF. PAPI Rwy 13, Rwy 31, Rwy 14, Rwy 32 and Rwy 27 operates 24 hrs. Flight Notification Service (ADCUS) avbl.

WEATHER DATA SOURCES: ASOS (651) 298–1410. LAWRS.

COMMUNICATIONS: CTAF 119.1 **ATIS** 118.35 **UNICOM** 122.95

Ⓡ **MINNEAPOLIS APP/DEP CON** 121.2

ST PAUL TOWER 119.1 Mon–Fri 1200–0400Z‡, Sat–Sun 1300–0400Z‡ **GND CON** 121.675 **CLNC DEL** 121.675

MINNEAPOLIS CLNC DEL 121.675 Mon–Fri 0400–1200Z‡, Sat–Sun 0400–1300Z‡

AIRSPACE: CLASS D svc Mon–Fri 1200–0400Z‡, Sat–Sun 1300–0400Z‡ other times CLASS E.

RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.

GOPHER (H) VORTACW 117.3 GEP Chan 120 N45°08.74′ W93°22.39′ 127° 18.4 NM to fld. 877/6E. **HIWAS.**

BABCO NDB (LOM) 385 BA N44°51.40′ W92°59.07′ 322° 5.7 NM to fld.

HOPEY NDB (MHW) 400 PPI N44°52.40′ W92°56.53′ 303° 6.2 NM to fld. NOTAM FILE STP.

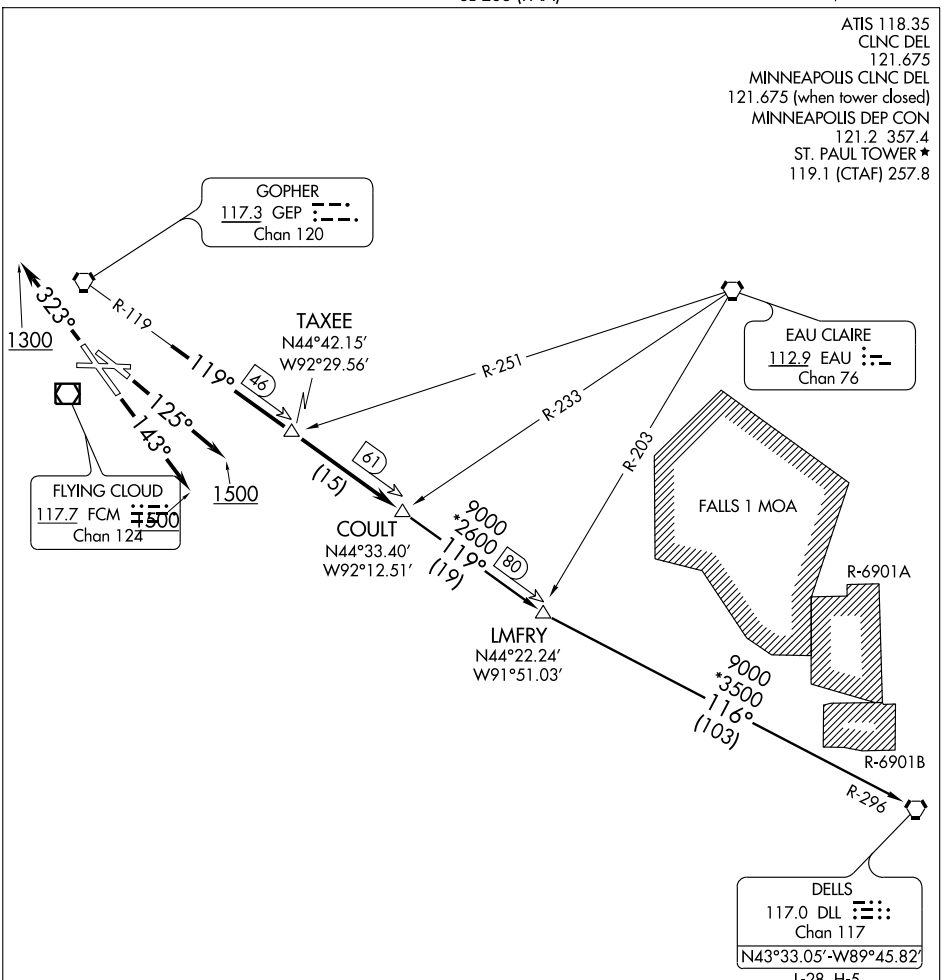
ILS/DME 111.5 I–BAO Chan 52 Rwy 32. Class IB. LOM BABCO NDB. DME unusable blo 3500′ and byd 25° left of course. ILS unmonitored when twr clsd.

ILS/DME 111.5 I–VKG Chan 52 Rwy 14. Class IB. LOC unusable byd 15° right and left of course. Glide slope unusable byd 4° left and 4° right of course. ILS unmonitored when twr clsd.

COMM/NAV/WEATHER REMARKS: Emerg frequency 121.5 not avbl at twr.

COULT THREE DEPARTURE

ST. PAUL DOWNTOWN HOLMAN FIELD (STP)
SL-263 (FAA)
ST. PAUL, MINNESOTA



TAKE-OFF MINIMUMS:

Rwy 9: Standard with minimum climb of 346′ per NM to 1500.
Rwy 13: Standard with minimum climb of 266′ per NM to 1500.
Rwy 14: Standard with minimum climb of 216′ per NM to 1500.
Rwy 27: Standard with minimum climb of 436′ per NM to 1500.
Rwy 31: NA-obstacles.
Rwy 32: Standard with minimum climb of 340′ per NM to 3000.

(NARRATIVE ON FOLLOWING PAGE)

NOTE: RADAR required.
NOTE: Chart not to scale.

COULT THREE DEPARTURE
(COULT3.COULT) 10098
ST. PAUL, MINNESOTA
ST. PAUL DOWNTOWN HOLMAN FIELD (STP)
NC-1, 21 OCT 2010 to 18 NOV 2010

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF RUNWAYS 9, 27: Fly assigned heading and altitude for radar vectors to intercept GEP R-119 to COULT INT/GEP 61 DME, thence . . . .
TAKE-OFF RUNWAY 13: Climb heading 125° to 1500 for radar vectors to intercept GEP R-119 to COULT INT/GEP 61 DME, thence . . . .
TAKE-OFF RUNWAY 14: Climb heading 143° to 1500 for radar vectors to intercept GEP R-119 to COULT INT/GEP 61 DME, thence . . . .
TAKE-OFF RUNWAY 32: Climb heading 323° to 1300 for radar vectors to intercept GEP R-119 to COULT INT/GEP 61 DME, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

DELLS TRANSITION (COULT3.DLL): From over COULT INT via GEP R-119 to LMFRY, then via DLL R-296 to DLL VORTAC.

TAKE-OFF OBSTACLE NOTES:

RWY 9: Multiple trees beginning 1265′ from DER, 167′ right of centerline, up to 75′ AGL/1055′ MSL.
Multiple trees beginning 1.1 NM from DER, 124′ left of centerline, up to 100′ AGL/1099′ MSL.
OL tank 1571′ from DER, 771′ right of centerline, 50′ AGL/811′ MSL.
Mobile crane 1163′ from DER, 123′ left of centerline, 50′ AGL/758′ MSL.

RWY 13: OL stack 2695′ from DER, 842′ right of centerline, 50′ AGL/820′ MSL.
Tree 1563′ from DER, 25′ right of centerline, 61′ AGL/748′ MSL.
Multiple trees beginning 1004′ from DER, 607′ left of centerline, 50′ AGL/767′ MSL.
Tower 1725′ from DER, 930′ left of centerline, 47′ AGL/753′ MSL
Vent on building 3029′ from DER, 629′ right of centerline, 10′ AGL/783′ MSL.
Multiple bushes beginning 194′ from DER, 88′ left of centerline, 7′ AGL/712′ MSL.
Stack 1879′ from DER, 25′ left of centerline, 51′ AGL/751′ MSL

RWY 14: Multiple trees beginning 805′ from DER, 2′ right of centerline, up to 112′ AGL/811′ MSL.
Multiple trees beginning 1205′ from DER, 64′ left of centerline, up to 80′ AGL/770′ MSL.
Poles 2810′ from DER, 715′ right of centerline, 91′ AGL/778′ MSL.

RWY 27: Multiple trees beginning 803′ from DER, 122′ left of centerline, up to 100′ AGL/994′ MSL.
Tree 783′ from DER, 105′ right of centerline, 25′ AGL/725′ MSL.
OL antenna 996′ from DER, 304′ right of centerline, 67′ AGL/767′ MSL.
Light pole 1328′ from DER, 222′ left of centerline, 50′ AGL/747′ MSL.
Building 2049′ from DER, 837′ right of centerline, 57′ AGL/761′ MSL.
Flagpole 2333′ from DER, 199′ left of centerline, 78′ AGL/778′ MSL.
Stack 1.8 NM from DER, 635′ left of centerline, 569′ AGL/1279′ MSL.

RWY 32: Road and vehicle 211′ from DER, 482′ left of centerline, 17′ AGL/717′ MSL.
Railroad beginning 369′ from DER, 329′ left of centerline, up to 23′ AGL/727′ MSL.
Pipe on DME 383′ from DER, 269′ right of centerline, 17′ AGL/722′ MSL.
Tree 1152′ from DER, 209′ left of centerline, 44′ AGL/744′ MSL.
Tree 1685′ from DER, 277′ right of centerline, 75′ AGL/770′ MSL.
Sign 5668′ from DER, 1924′ left of centerline, 86′ AGL/874′ MSL.
Trees 5614′ from DER, 1796′ right of centerline, 100′ AGL/939′ MSL.
Building 5779′ from DER, 1733′ right of centerline, 72′ AGL/910′ MSL.
Pole 1 NM from DER, 1835′ right of centerline, 157′ AGL/973′ MSL.
Building 1.1 NM from DER, 2170′ left of centerline, 122′ AGL/886′ MSL.
Multiple buildings beginning 1.1 NM from DER, 378′ left of centerline, up to 142′ AGL/918′ MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010

DARWIN THREE DEPARTURE

TAKE-OFF MINIMUMS
Rwy 9: Standard with minimum climb of 346' per NM to 1500.
Rwy 13: Standard with minimum climb of 266' per NM to 1500.
Rwy 14: Standard with minimum climb of 216' per NM to 1500.
Rwy 27: Standard with minimum climb of 436' per NM to 1500.
Rwy 32: Standard with minimum climb of 340' per NM to 3000.
Rwy 31: NA-obstacles.

NOTE: RADAR required.
NOTE: Chart not to scale.

DARWIN THREE DEPARTURE
(DWN3.DWN) 10042
ST. PAUL, MINNESOTA
ST. PAUL DOWNTOWN HOLMAN FIELD (STP)
NC-1, 21 OCT 2010 to 18 NOV 2010

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF RUNWAYS 9, 27: Fly assigned heading and altitude for radar vectors to MSP VOR/DME then via MSP R-281 and DWN R-095 to DWN VORTAC, thence . . . .

TAKE-OFF RUNWAY 13: Climb heading 125° to 1500 for radar vectors to MSP VOR/DME then via MSP R-281 and DWN R-095 to DWN VORTAC, thence . . . .

TAKE-OFF RUNWAY 14: Climb heading 143° to 1500 for radar vectors to MSP VOR/DME then via MSP R-281 and DWN R-095 to DWN VORTAC, thence . . . .

TAKE-OFF RUNWAY 32: Climb heading 323° to 1300 for radar vectors to MSP VOR/DME then via MSP R-281 and DWN R-095 to DWN VORTAC, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

ABERDEEN TRANSITION (DWN3.ABR): From over DWN VORTAC via DWN R-271 and ABR R-088 to ABR VOR/DME.

TAKE-OFF OBSTACLE NOTES

RWY 9: Multiple trees beginning 1265′ from DER, 167′ right of centerline, up to 75′ AGL/1055′ MSL.
Multiple trees beginning 1.1 NM from DER, 124′ left of centerline, up to 100′ AGL/1099′ MSL.
OL tank 1571′ from DER, 771′ right of centerline, 50′ AGL/811′ MSL.
Mobile crane 1163′ from DER, 123′ left of centerline, 50′ AGL/758′ MSL.

RWY 13: OL stack 2695′ from DER, 842′ right of centerline, 50′ AGL/820′ MSL.
Tree 1563′ from DER, 25′ right of centerline, 61′ AGL/748′ MSL.
Multiple trees beginning 1004′ from DER, 607′ left of centerline, 50′ AGL/767′ MSL.
Tower 1725′ from DER, 930′ left of centerline, 47′ AGL/753′ MSL
Vent on building 3029′ from DER, 629′ right of centerline, 10′ AGL/783′ MSL.
Multiple bushes beginning 194′ from DER, 88′ left of centerline, 7′ AGL/712′ MSL.
Stack 1879′ from DER, 25′ left of centerline, 51′ AGL/751′ MSL

RWY 14: Multiple trees beginning 805′ from DER, 2′ right of centerline, up to 112′ AGL/811′ MSL.
Multiple trees beginning 1205′ from DER, 64′ left of centerline, up to 80′ AGL/770′ MSL.
Poles 2810′ from DER, 715′ right of centerline, 91′ AGL/778′ MSL.

RWY 27: Multiple trees beginning 803′ from DER, 122′ left of centerline, up to 100′ AGL/994′ MSL.
Tree 783′ from DER, 105′ right of centerline, 25′ AGL/725′ MSL.
OL antenna 996′ from DER, 304′ right of centerline, 67′ AGL/767′ MSL.
Light pole 1328′ from DER, 222′ left of centerline, 50′ AGL/747′ MSL.
Building 2049′ from DER, 837′ right of centerline, 57′ AGL/761′ MSL.
Flagpole 2333′ from DER, 199′ left of centerline, 78′ AGL/778′ MSL.
Stack 1.8 NM from DER, 635′ left of centerline, 569′ AGL/1279′ MSL.

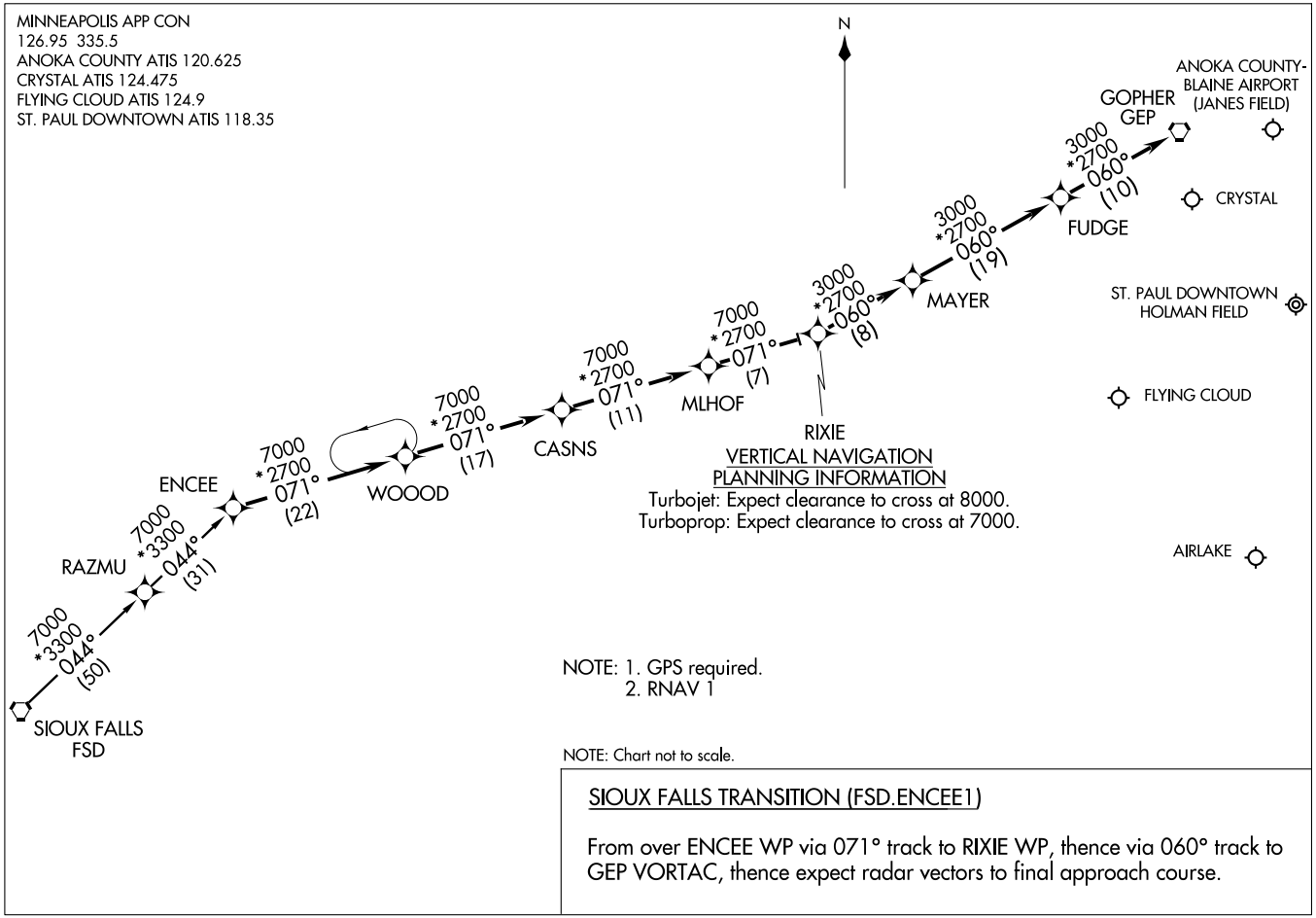
RWY 32: Road and vehicle 211′ from DER, 482′ left of centerline, 17′ AGL/717′ MSL.
Railroad beginning 369′ from DER, 329′ left of centerline, up to 23′ AGL/727′ MSL.
Pipe on DME 383′ from DER, 269′ right of centerline, 17′ AGL/722′ MSL.
Tree 1152′ from DER, 209′ left of centerline, 44′ AGL/744′ MSL.
Tree 1685′ from DER, 277′ right of centerline, 75′ AGL/770′ MSL.
Sign 5668′ from DER, 1924′ left of centerline, 86′ AGL/874′ MSL.
Trees 5614′ from DER, 1796′ right of centerline, 100′ AGL/939′ MSL.
Building 5779′ from DER, 1733′ right of centerline, 72′ AGL/910′ MSL.
Pole 1 NM from DER, 1835′ right of centerline, 157′ AGL/973′ MSL.
Building 1.1 NM from DER, 2170′ left of centerline, 122′ AGL/886′ MSL.
Multiple buildings beginning 1.1 NM from DER, 378′ left of centerline, up to 142′ AGL/918′ MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010

ENCEE ONE ARRIVAL (RNAV)

(ENCEE.ENCEE1) 07242

MINNEAPOLIS-ST. PAUL, MINNESOTA



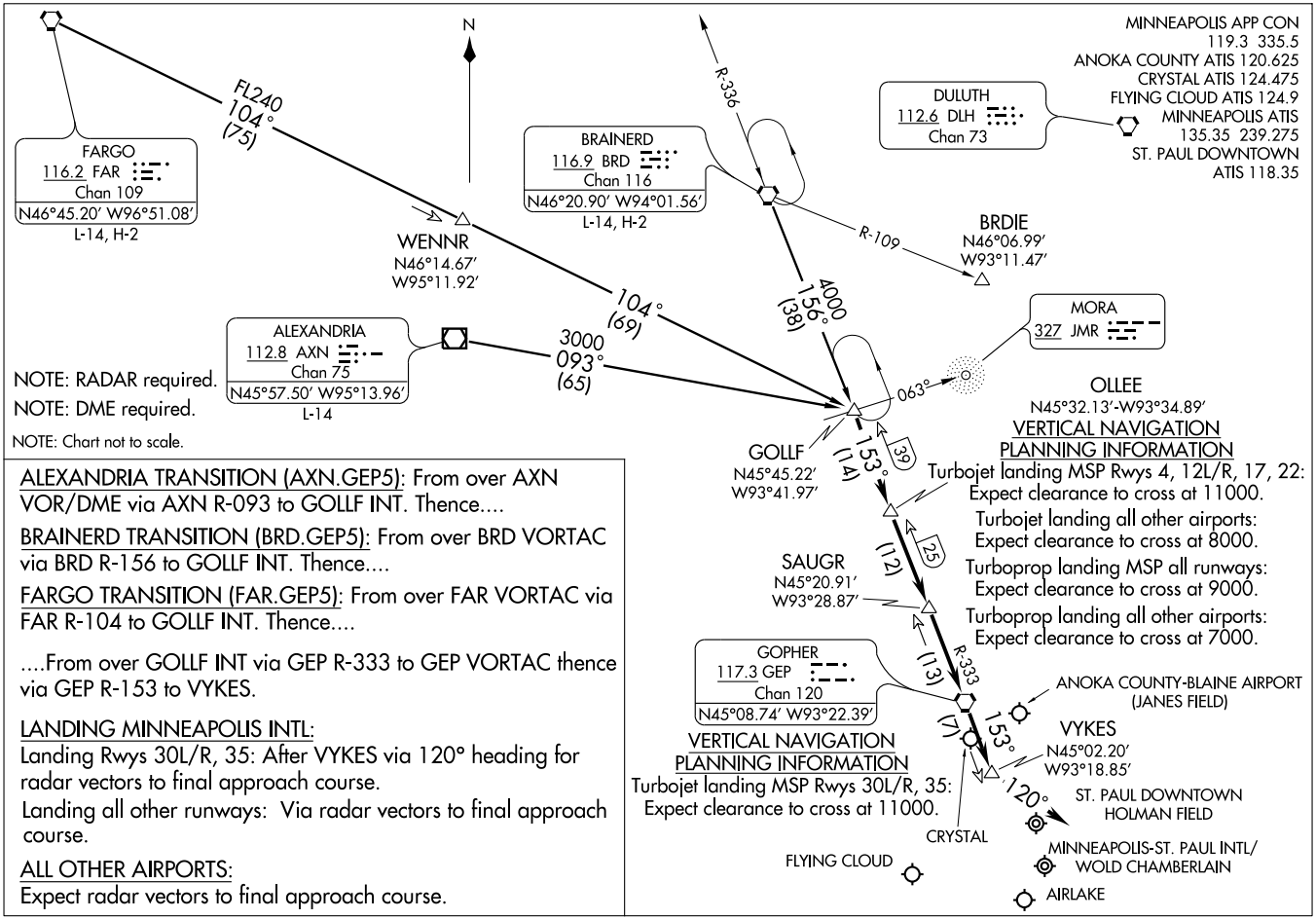
SIOUX FALLS TRANSITION (FSD.ENCEE1)

From over ENCEE WP via 071° track to RIXIE WP, thence via 060° track to GEP VORTAC, thence expect radar vectors to final approach course.

ENCEE ONE ARRIVAL (RNAV)
(ENCEE.ENCEE1) 07242
ST-263 (FAA)
MINNEAPOLIS-ST. PAUL, MINNESOTA

GOPHER FIVE ARRIVAL

(GEP.GEP5) 08157



NOTE: RADAR required.

NOTE: DME required.

NOTE: Chart not to scale.

ALEXANDRIA TRANSITION (AXN.GEP5): From over AXN VOR/DME via AXN R-093 to GOLLF INT. Thence....

BRAINERD TRANSITION (BRD.GEP5): From over BRD VORTAC via BRD R-156 to GOLLF INT. Thence....

FARGO TRANSITION (FAR.GEP5): From over FAR VORTAC via FAR R-104 to GOLLF INT. Thence....

....From over GOLLF INT via GEP R-333 to GEP VORTAC thence via GEP R-153 to VYKES.

LANDING MINNEAPOLIS INTL:

Landing Rwys 30L/R, 35: After VYKES via 120° heading for radar vectors to final approach course.

Landing all other runways: Via radar vectors to final approach course.

ALL OTHER AIRPORTS:

Expect radar vectors to final approach course.

GOPHER FIVE ARRIVAL

(GEP.GEP5) 08157

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA

MINNEAPOLIS, MINNESOTA

LOC/DME I-VKG	APP CRS	Rwy Idg	6148
111.5	143°	TDZE	705
Chan 52		Apt Elev	705

ILS or LOC RWY 14

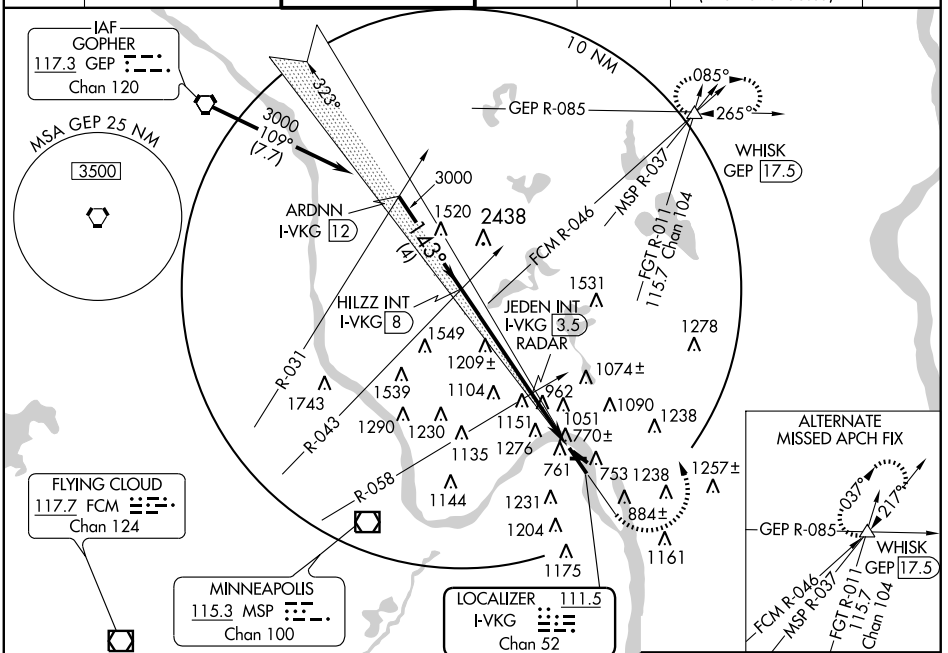
ST. PAUL DOWNTOWN HOLMAN FIELD (STP)

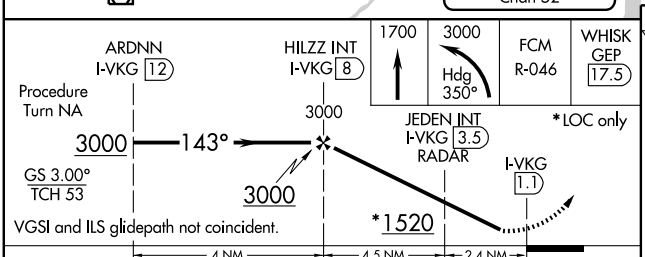
Visibility reduction by helicopters NA. When local altimeter setting not received, use South St. Paul altimeter setting. Inoperative table does not apply to S-ILS 14. For inoperative MALSR increase S-LOC-14 Cat A and B visibility to RVR 5000. JEDEN Fix Minimums: increase S-LOC-14 Cat A and B visibility to RVR 5000.

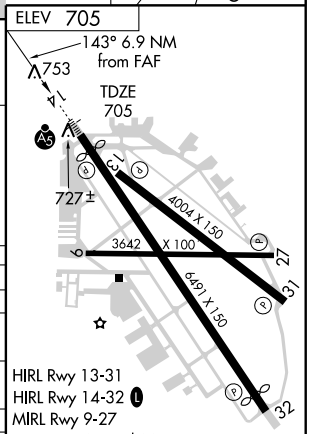
MALSR

MISSED APPROACH: Climb to 1700 then climbing left turn to 3000 via heading 350° and via FCM VOR/DME R-046 to WHISK INT/GEP 17.5 DME and hold.

ATIS	MINNEAPOLIS APP CON	ST. PAUL TOWER ★	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
118.35	121.2 357.4	119.1(CTAF) L 257.8	121.675	121.675	121.675 (when tower closed)	122.95







CATEGORY	A	B	C	D
S-ILS 14	955/40	250 (300-¾)		
S-LOC 14	1520/40	815 (900-¾)	1520-2 815 (900-2)	1520-2¼ 815 (900-2¼)
CIRCLING	1580-1 875 (900-1)	1580-1¼ 875 (900-1¼)	1580-2½ 875 (900-2½)	1580-2¾ 875 (900-2¾)
JEDEN FIX MINIMUMS				
S-LOC 14	1360/40	655 (700-¾)	1360/60 655 (700-1¼)	1360-1½ 655 (700-1½)
CIRCLING	1580-1 875 (900-1)	1580-1¼ 875 (900-1¼)	1580-2½ 875 (900-2½)	1580-2¾ 875 (900-2¾)

FAF to MAP 6.9 NM

Knots	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOC/DME I-BAO	APP CRS	Rwy Idg	6109
111.5	323°	TDZE	704
Chan 52		Apt Elev	705

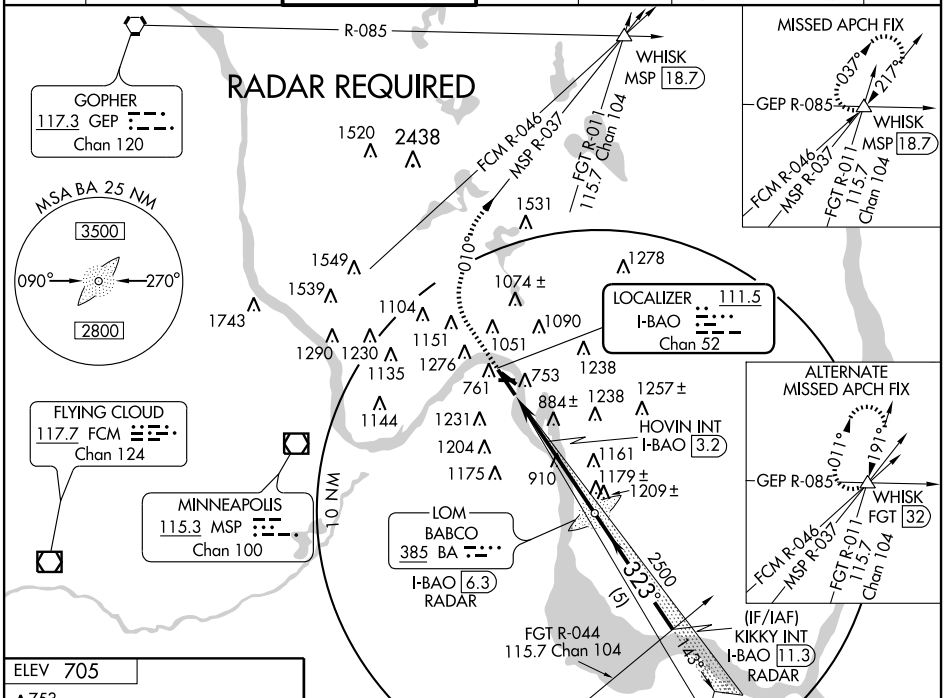
ILS or LOC RWY 32

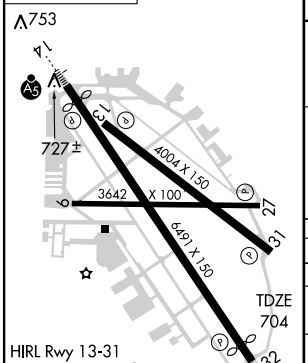
ST. PAUL DOWNTOWN HOLMAN FIELD (STP)

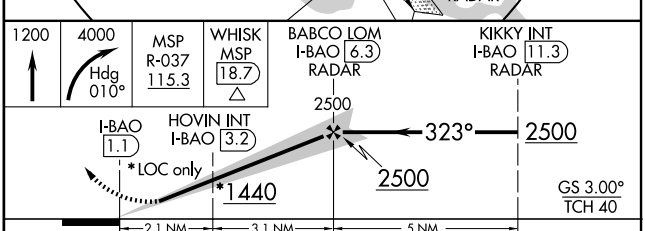
Visibility reduction by helicopters NA. When local altimeter setting not received, use South St. Paul Muni altimeter setting. Radar or DME required.

MISSED APPROACH: Climb to 1200 then climbing right turn to 4000 via heading 010° and MSP R-037 to WHISK INT/MSP 18.7 DME and hold.

ATIS	MINNEAPOLIS APP CON	ST. PAUL TOWER ★	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
118.35	121.2 357.4	119.1(CTAF) L 257.8	121.675	121.675	121.675 (when tower closed)	122.95







FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

CATEGORY	A	B	C	D
S-ILS 32	954/50	250 (300-1)		
S-LOC 32	1440/50	736 (800-1)	1440-2 736 (800-2)	1440-2¼ 736 (800-2¼)
CIRCLING	1580-1 875 (900-1)	1580-1¼ 875 (900-1¼)	1580-2½ 875 (900-2½)	1580-2¾ 875 (900-2¾)
HOVIN FIX MINIMUMS				
S-LOC 32	1280/50	576 (600-1)	1280-1½ 576 (600-1½)	1280-1¾ 576 (600-1¾)
CIRCLING	1580-1 875 (900-1)	1580-1¼ 875 (900-1¼)	1580-2½ 875 (900-2½)	1580-2¾ 875 (900-2¾)

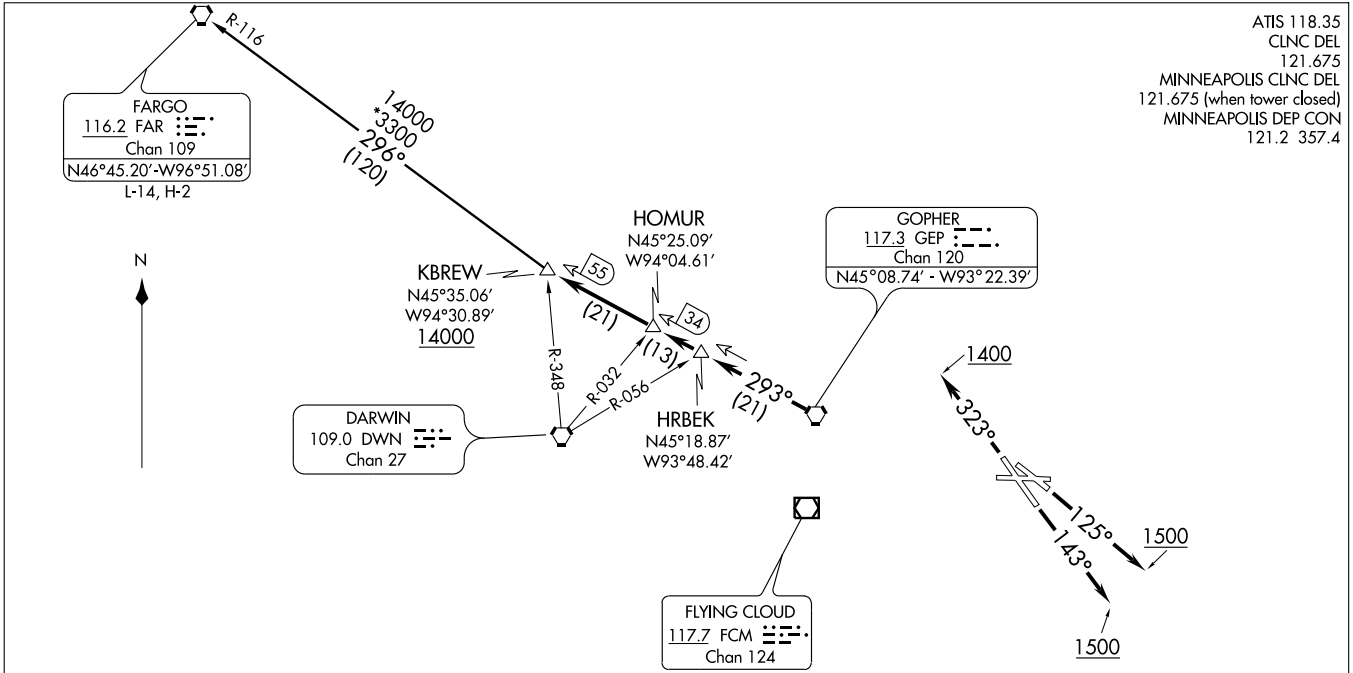
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

KBREW THREE DEPARTURE

(KBREW3.KBREW) 10098

ST. PAUL DOWNTOWN HOLMAN FIELD (STP)

ST. PAUL, MINNESOTA



TAKE-OFF MINIMUMS:

Rwy 9: Standard with minimum climb of 346' per NM to 1500.
Rwy 13: Standard with minimum climb of 266' per NM to 1500.
Rwy 14: Standard with minimum climb of 216' per NM to 1500.
Rwy 27: Standard with minimum climb of 436' per NM to 1500.
Rwy 31: NA - obstacles.
Rwy 32: Standard with minimum climb of 340' per NM to 3000.

NOTE: RADAR required.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

KBREW THREE DEPARTURE

(KBREW3.KBREW) 10098

ST. PAUL DOWNTOWN HOLMAN FIELD (STP)

ST. PAUL, MINNESOTA

SL-263 (FAA)

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF RUNWAYS 9, 27: Fly assigned heading and altitude for radar vectors to GEP VORTAC then via GEP R-293 to KBREW INT/ GEP 55 DME, thence . . . .

TAKE-OFF RUNWAY 13: Climb heading 125° to 1500 for radar vectors to GEP VORTAC then via GEP R-293 to KBREW INT/ GEP 55 DME, thence . . . .

TAKE-OFF RUNWAY 14: Climb heading 143° to 1500 for radar vectors to GEP VORTAC then via GEP R-293 to KBREW INT/ GEP 55 DME, thence . . . .

TAKE-OFF RUNWAY 32: Climb heading 323° to 1400 for radar vectors to GEP VORTAC then via GEP R-293 to KBREW INT/ GEP 55 DME, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

FARGO TRANSITION (KBREW3.FAR): From over KBREW INT via FAR R-116 to FAR VORTAC.

TAKE-OFF OBSTACLE NOTES:

RWY 9: Multiple trees beginning 1265' from DER, 167' right of centerline, up to 75' AGL/1055' MSL.
Multiple trees beginning 1.1 NM from DER, 124' left of centerline, up to 100' AGL/1099' MSL.
OL tank 1571' from DER, 771' right of centerline, 50' AGL/811' MSL.
Mobile crane 1163' from DER, 123' left of centerline, 50' AGL/758' MSL.

RWY 13: OL stack 2695' from DER, 842' right of centerline, 50' AGL/820' MSL.
Tree 1563' from DER, 25' right of centerline, 61' AGL/748' MSL.
Multiple trees beginning 1004' from DER, 607' left of centerline, 50' AGL/767' MSL.
Tower 1725' from DER, 930' left of centerline, 47' AGL/753' MSL
Vent on building 3029' from DER, 629' right of centerline, 10' AGL/783' MSL.
Multiple bushes beginning 194' from DER, 88' left of centerline, 7' AGL/712' MSL.
Stack 1879' from DER, 25' left of centerline, 51' AGL/751' MSL

RWY 14: Multiple trees beginning 805' from DER, 2' right of centerline, up to 112' AGL/811' MSL.
Multiple trees beginning 1205' from DER, 64' left of centerline, up to 80' AGL/770' MSL.
Poles 2810' from DER, 715' right of centerline, 91' AGL/778' MSL.

RWY 27: Multiple trees beginning 803' from DER, 122' left of centerline, up to 100' AGL/994' MSL.
Tree 783' from DER, 105' right of centerline, 25' AGL/725' MSL.
OL antenna 996' from DER, 304' right of centerline, 67' AGL/767' MSL.
Light pole 1328' from DER, 222' left of centerline, 50' AGL/747' MSL.
Building 2049' from DER, 837' right of centerline, 57' AGL/761' MSL.
Flagpole 2333' from DER, 199' left of centerline, 78' AGL/778' MSL.
Stack 1.8 NM from DER, 635' left of centerline, 569' AGL/1279' MSL.

RWY 32: Road and vehicle 211' from DER, 482' left of centerline, 17' AGL/717' MSL.
Railroad beginning 369' from DER, 329' left of centerline, up to 23' AGL/727' MSL.
Pipe on DME 383' from DER, 269' right of centerline, 17' AGL/722' MSL.
Tree 1152' from DER, 209' left of centerline, 44' AGL/744' MSL.
Tree 1685' from DER, 277' right of centerline, 75' AGL/770' MSL.
Sign 5668' from DER, 1924' left of centerline, 86' AGL/874' MSL.
Trees 5614' from DER, 1796' right of centerline, 100' AGL/939' MSL.
Building 5779' from DER, 1733' right of centerline, 72' AGL/910' MSL.
Pole 1 NM from DER, 1835' right of centerline, 157' AGL/973' MSL.
Building 1.1 NM from DER, 2170' left of centerline, 122' AGL/886' MSL.
Multiple buildings beginning 1.1 NM from DER, 378' left of centerline, up to 142' AGL/918' MSL.

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NDB PPI	APP CRS	Rwy Idg	4004
400	304°	TDZE	704
		Apt Elev	705

NDB RWY 31

ST. PAUL DOWNTOWN HOLMAN FIELD (STP)

NA

MISSED APPROACH: Climbing right turn to 2700 direct PPI NDB and hold.

ATIS	MINNEAPOLIS APP CON	ST. PAUL TOWER ★	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
118.35	121.2 357.4	119.1(CTAF) L 257.8	121.675	121.675	121.675 (when tower closed)	122.95

GOPHER 117.3 GEP Chan 120

3400 to PPI NDB 126° (24.6)

MSA PPI 25 NM: 3400; 090° – 270°; 2800

1520 2438 1531 1278 1549 1074± 1539 1104 1051 1090 1743 1230 1151 1238 1290 1135 1276 753 761 1144 1231 1238 1257± 884± 1204 1175 1161

124° 304° 079° 259° 124°

IAF HOPEY 400 PPI

10 NM

FARMINGTON 115.7 FGT Chan 104

2800 029° (17.8)

ELEV 705

753 727± 4004 X 150 3642 X 100 6491 X 150 304° 5.9 NM from FAF 27 31 32 TDZE 704

HIRL Rwy 13-31
HIRL Rwy 14-32 L
MIRL Rwy 9-27
REIL Rwys 31 and 32

2700 PPI 400

NDB 124° 304° 2700 2700 Remain within 10 NM

3.12° TCH 46

VGSI and descent angles not coincident.

5.9 NM

CATEGORY	A	B	C	D
S-31	1600-1¼ 896 (900-1¼)		1600-2¾ 896 (900-2¾)	1600-3 896 (900-3)
CIRCLING	1600-1¼ 895 (900-1¼)		1600-2¾ 895 (900-2¾)	1600-3 895 (900-3)

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ORSKY FOUR DEPARTURE

NC-1, 21 OCT 2010 to 18 NOV 2010

ATIS 118.35
CLNC DEL 121.675
MINNEAPOLIS CLNC DEL
121.675 (when tower closed)
MINNEAPOLIS DEP CON
121.2 357.4

GOPHER
117.3 GEP
Chan 120

MINNEAPOLIS
115.3 MSP
Chan 100
N44°53.79′ - W93°14.19′

FLYING CLOUD
117.7 FCM
Chan 124

FAIRMONT
110.2 FRM
Chan 39

1300
323°
125°
143°
1500
1500

JURNY
N44°36.52′
W93°28.34′
208°
(20)
R-258
208°
(13)
(33)
R-198
J21
(15)
(48)
RUMLE
N44°25.28′
W93°37.47′
FARMINGTON
115.7 FGT
Chan 104
(37)
(85)
R-318
R-268
HALFWAY
111.2 FOW
Chan 49
PEDLN
N44°12.16′
W93°48.02′
R-074
ORSKY
N43°40.19′
W94°13.38′
9000
*2800
208°
(26)
ONTIJ
N43°17.86′
W94°30.77′
12000 (MRA)
(111)
J21
12000
*3000
195°
(22)
9000
*2900
176°
(64)
R-278
MASON CITY
114.9 MCW
Chan 96
GOOLD
N42°57.52′
W94°42.85′
MCW
R-257
SIMJI
N42°49.56′
W94°47.52′
(9)
R-312
R-294
R-356
FORT DODGE
113.5 FOD
Chan 82
N42°36.67′-W94°17.69′
L-12, H-5
EYHUX
N42°26.13′
W95°01.16′
(25)
J21
(39)
(83)
R-308
DES MOINES
117.5 DSM
Chan 122
NOTE: RADAR required.
NOTE: Chart not to scale.
114.8 OBH
R-070
Chan 95
PUMKN
N41°50.54′
W95°21.52′
R-281
(NARRATIVE ON FOLLOWING PAGE)
(44)
R-015
OMAHA
116.3 OVR
Chan 110
N41°10.04′-W95°44.20′
L-10-12, H-5

TAKE-OFF MINIMUMS

Rwy 9: Standard with minimum climb of 346′ per NM to 1500.
Rwy 13: Standard with minimum climb of 266′ per NM to 1500.
Rwy 14: Standard with minimum climb of 216′ per NM to 1500.
Rwy 27: Standard with minimum climb of 436′ per NM to 1500.
Rwy 31: NA-obstacles.
Rwy 32: Standard with minimum climb of 340′ per NM to 3000.

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF RUNWAYS 9, 27: Fly assigned heading and altitude for radar vectors to MSP VOR/DME then via MSP R-208 to ORSKY INT/ MSP 85 DME, thence....

TAKE-OFF RUNWAY 13: Climb heading 125° to 1500 for radar vectors to MSP VOR/DME then via MSP R-208 to ORSKY INT/ MSP 85 DME, thence....

TAKE-OFF RUNWAY 14: Climb heading 143° to 1500 for radar vectors to MSP VOR/DME then via MSP R-208 to ORSKY INT/ MSP 85 DME, thence....

TAKE-OFF RUNWAY 32: Climb heading 323° to 1300 for radar vectors to MSP VOR/DME then via MSP R-208 to ORSKY INT/ MSP 85 DME, thence....

....via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

FORT DODGE TRANSITION (ORSKY4.FOD): From over ORSKY INT via FOD R-356 to FOD VORTAC.

OMAHA TRANSITION (ORSKY4.OVR): From over ORSKY INT via MSP R-208 to ONTIJ INT then via OVR R-015 to OVR VORTAC.

TAKE-OFF OBSTACLE NOTES

RWY 9: Multiple trees beginning 1265' from DER, 167' right of centerline, up to 75' AGL/1055' MSL.
Multiple trees beginning 1.1 NM from DER, 124' left of centerline, up to 100' AGL/1099' MSL.
OL tank 1571' from DER, 771' right of centerline, 50' AGL/811' MSL.
Mobile crane 1163' from DER, 123' left of centerline, 50' AGL/758' MSL.

RWY 13: OL stack 2695' from DER, 842' right of centerline, 50' AGL/820' MSL.
Tree 1563' from DER, 25' right of centerline, 61' AGL/748' MSL.
Multiple trees beginning 1004' from DER, 607' left of centerline, 50' AGL/767' MSL.
Tower 1725' from DER, 930' left of centerline, 47' AGL/753' MSL
Vent on building 3029' from DER, 629' right of centerline, 10' AGL/783' MSL.
Multiple bushes beginning 194' from DER, 88' left of centerline, 7' AGL/712' MSL.
Stack 1879' from DER, 25' left of centerline, 51' AGL/751' MSL

RWY 14: Multiple trees beginning 805' from DER, 2' right of centerline, up to 112' AGL/811' MSL.
Multiple trees beginning 1205' from DER, 64' left of centerline, up to 80' AGL/770' MSL.
Poles 2810' from DER, 715' right of centerline, 91' AGL/778' MSL.

RWY 27: Multiple trees beginning 803' from DER, 122' left of centerline, up to 100' AGL/994' MSL.
Tree 783' from DER, 105' right of centerline, 25' AGL/725' MSL.
OL antenna 996' from DER, 304' right of centerline, 67' AGL/767' MSL.
Light pole 1328' from DER, 222' left of centerline, 50' AGL/747' MSL.
Building 2049' from DER, 837' right of centerline, 57' AGL/761' MSL.
Flagpole 2333' from DER, 199' left of centerline, 78' AGL/778' MSL.
Stack 1.8 NM from DER, 635' left of centerline, 569' AGL/1279' MSL.

RWY 32: Road and vehicle 211' from DER, 482' left of centerline, 17' AGL/717' MSL.
Railroad beginning 369' from DER, 329' left of centerline, up to 23' AGL/727' MSL.
Pipe on DME 383' from DER, 269' right of centerline, 17' AGL/722' MSL.
Tree 1152' from DER, 209' left of centerline, 44' AGL/744' MSL.
Tree 1685' from DER, 277' right of centerline, 75' AGL/770' MSL.
Sign 5668' from DER, 1924' left of centerline, 86' AGL/874' MSL.
Trees 5614' from DER, 1796' right of centerline, 100' AGL/939' MSL.
Building 5779' from DER, 1733' right of centerline, 72' AGL/910' MSL.
Pole 1 NM from DER, 1835' right of centerline, 157' AGL/973' MSL.
Building 1.1 NM from DER, 2170' left of centerline, 122' AGL/886' MSL.
Multiple buildings beginning 1.1 NM from DER, 378' left of centerline, up to 142' AGL/918' MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 14

ST. PAUL DOWNTOWN HOLMAN FIELD (STP)

APP CRS	Rwy Idg	6148
143°	TDZE	705
	Apt Elev	705

DME/DME RNP-0.3 NA.
Circling to Rwy 9, 13, 27 NA at night.
Straight-in minimums NA at night.

MALSR

MISSED APPROACH: Climbing left turn to 3000 direct WHISK and hold.

ATIS	MINNEAPOLIS APP CON	ST. PAUL TOWER ★	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
118.35	121.2 357.4	119.1(CTAF) L 257.8	121.675	121.675	121.675 (when tower closed)	122.95

Procedure NA for arrival on GEP VORTAC airway radials 085 CW 159.

4 NM 014° 194° WHISK

(IAF) GOPHER GEP

3000 114° (5.8)

(IF) TEPAW

2800 133° (6.2)

(FAF) MRANN

143°

RW14

MSA RW14 25 NM 3500

ELEV 705

143° to RW14

TDZE 705

727±

4004 X 150

3642 X 100

6491 X 150

HIRL Rwy 13-31
HIRL Rwy 14-32 L
MIRL Rwy 9-27
REIL Rwys 31 and 32

3000 WHISK

TEPAW 3000 133° 2800 MRANN 143° RW14

Procedure Turn NA

3.05° TCH 54

2.4 NM to RW13

VGSI and descent angles not coincident.

6.2 NM 3.9 NM 2.4 NM

CATEGORY	A	B	C	D
LNAV MDA	1520-1 815 (900-1)	1520-1¼ 815 (900-1¼)	1520-2½ 815 (900-2½)	1520-2¾ 815 (900-2¾)
CIRCLING	1580-1 875 (900-1)	1580-1¼ 875 (900-1¼)	1580-2½ 875 (900-2½)	1580-2¾ 875 (900-2¾)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	6109
CH 50123	323°	TDZE	704
W32A		Apt Elev	705

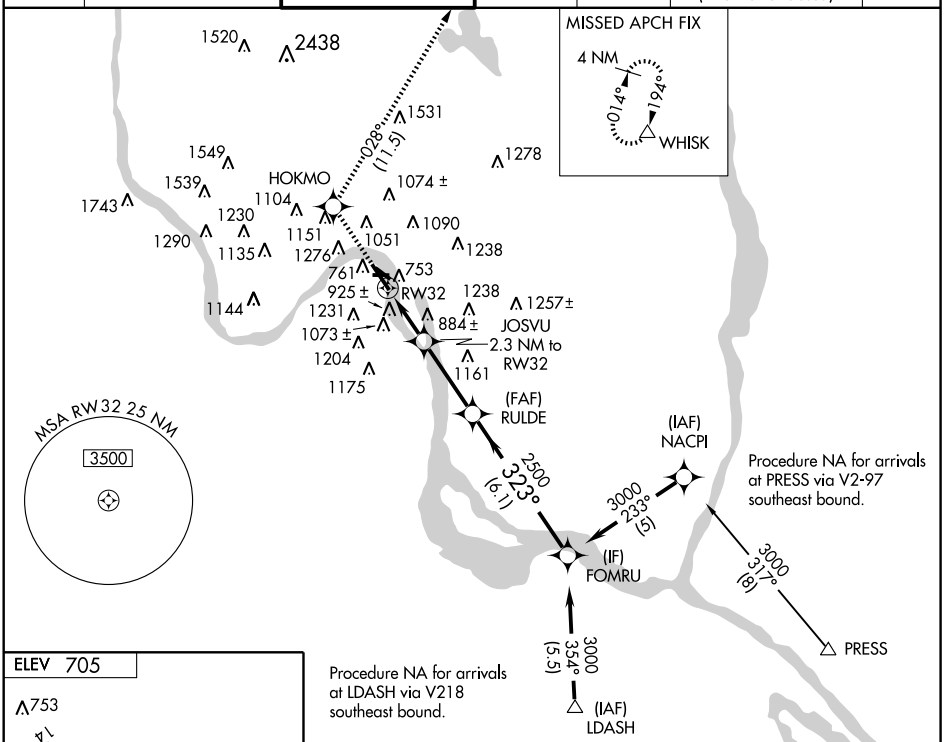
RNAV (GPS) RWY 32

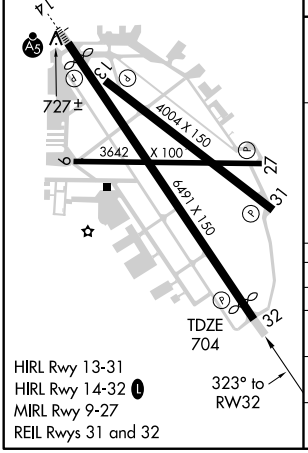
ST. PAUL DOWNTOWN HOLMAN FIELD (STP)

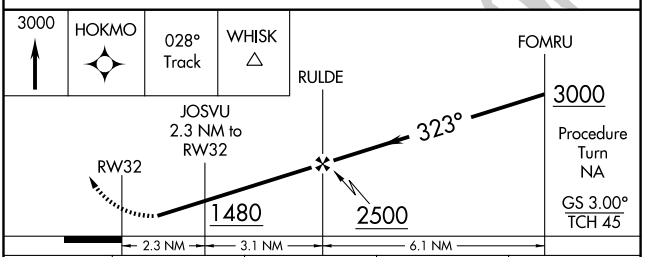
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -16°C (4°F).
Circling to Rwy 9, 13, 27 NA at night.

MISSED APPROACH: Climb to 3000 direct HOKMO and via 028° track to WHISK and hold.

ATIS	MINNEAPOLIS APP CON	ST. PAUL TOWER ★	GND CON	CLNC DEL	MINNEAPOLIS CLNC DEL	UNICOM
118.35	121.2 357.4	119.1(CTAF) L 257.8	121.675	121.675	121.675 (when tower closed)	122.95





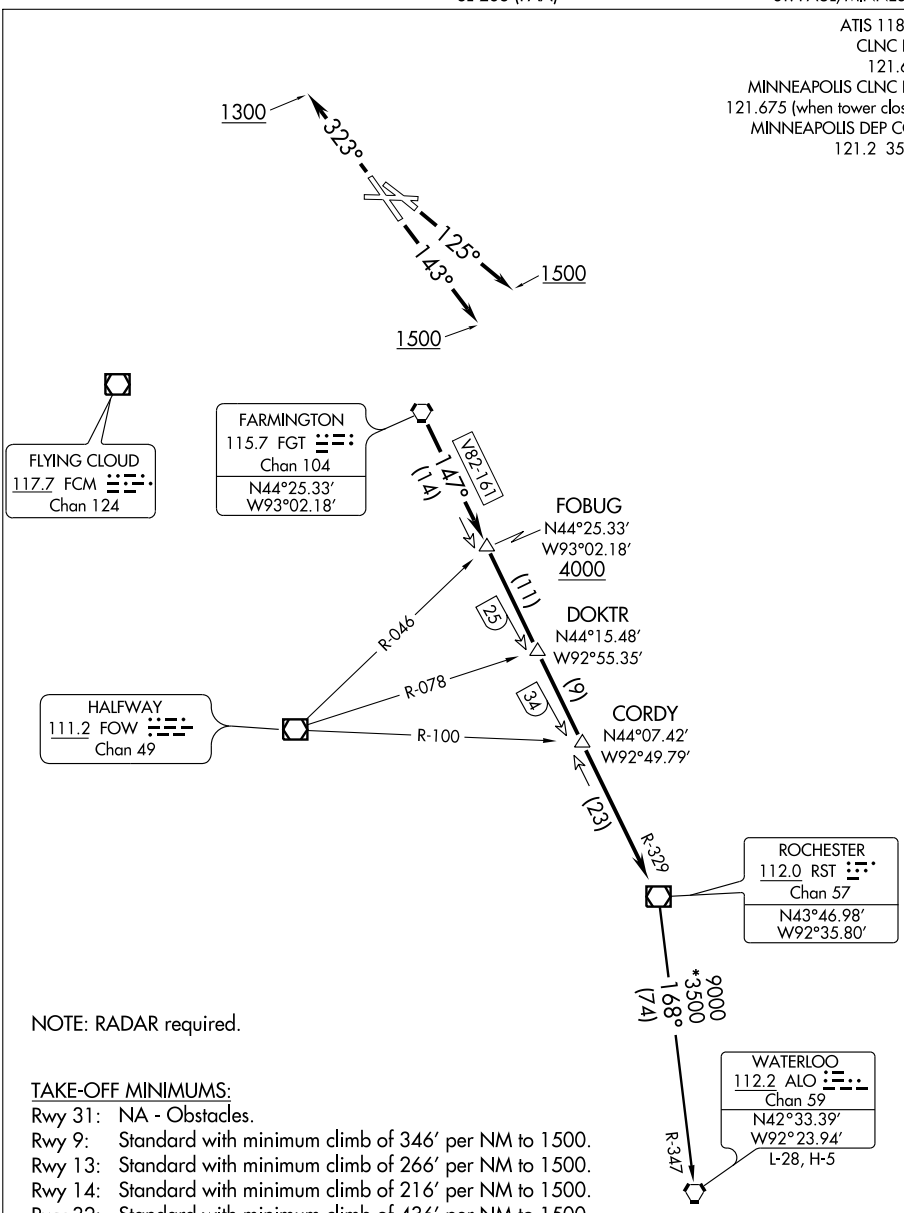


CATEGORY	A	B	C	D
LPV DA	1082-1¼ 378 (400-1¼)			
LNAV/VNAV DA	1377-2½ 673 (700-2½)			
LNAV MDA	1320-1 616 (700-1)		1320-1¾ 616 (700-1¾)	1320-2 616 (700-2)
CIRCLING	1580-2½ 875 (900-2½)			1580-2¾ 875 (900-2¾)

NC-1, 21 OCT 2010 to 18 NOV 2010

NC-1, 21 OCT 2010 to 18 NOV 2010

ATIS 118.35
CLNC DEL
121.675
MINNEAPOLIS CLNC DEL
121.675 (when tower closed)
MINNEAPOLIS DEP CON
121.2 357.4



NOTE: RADAR required.

TAKE-OFF MINIMUMS:

Rwy 31: NA - Obstacles.
Rwy 9: Standard with minimum climb of 346′ per NM to 1500.
Rwy 13: Standard with minimum climb of 266′ per NM to 1500.
Rwy 14: Standard with minimum climb of 216′ per NM to 1500.
Rwy 32: Standard with minimum climb of 436′ per NM to 1500.
Standard with minimum climb of 340′ per NM to 3000.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

NC-1, 21 OCT 2010 to 18 NOV 2010

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF RUNWAYS 9, 27: Fly assigned heading and altitude for radar vectors to FGT VORTAC then via FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/ FGT 14 DME at or above 4000, Thence....

TAKE-OFF RUNWAY 13: Climb heading 125° to 1500 for radar vectors to FGT VORTAC then via FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/FGT 14 DME at or above 4000, Thence....

TAKE-OFF RUNWAY 14: Climb heading 143° to 1500 for radar vectors to FGT VORTAC then via FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/ FGT 14 DME at or above 4000, Thence....

TAKE-OFF RUNWAY 32: Climb heading 323° to 1300 for radar vectors to FGT VORTAC then via FGT R-147 and RST R-329 to RST VOR/DME. Cross FOBUG INT/ FGT 14 DME at or above 4000, Thence....

....via assigned transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

WATERLOO TRANSITION (RST4.ALO): From over RST VOR/DME via RST R-168 and ALO R-347 to ALO VORTAC.

TAKE-OFF OBSTACLE NOTES:

RWY 9: Multiple trees beginning 1265′ from DER, 167′ right of centerline, up to 75′ AGL/1055′ MSL. Multiple trees beginning 1.1 NM from DER, 124′ left of centerline, up to 100′ AGL/1099′ MSL. OL tank 1571′ from DER, 771′ right of centerline, 50′ AGL/811′ MSL. Mobile crane 1163′ from DER, 123′ left of centerline, 50′ AGL/758′ MSL.

RWY 13: OL stack 2695′ from DER, 842′ right of centerline, 50′ AGL/820′ MSL. Tree 1563′ from DER, 25′ right of centerline, 61′ AGL/748′ MSL. Multiple trees beginning 1004′ from DER, 607′ left of centerline, 50′ AGL/767′ MSL. Tower 1725′ from DER, 930′ left of centerline, 47′ AGL/753′ MSL. Vent on building 3029′ from DER, 629′ right of centerline, 10′ AGL/783′ MSL. Multiple bushes beginning 194′ from DER, 88′ left of centerline, 7′ AGL/712′ MSL. Stack 1879′ from DER, 25′ left of centerline, 51′ AGL/751′ MSL.

RWY 14: Multiple trees beginning 805′ from DER, 2′ right of centerline, up to 112′ AGL/811′ MSL. Multiple trees beginning 1205′ from DER, 64′ left of centerline, up to 80′ AGL/770′ MSL. Poles 2810′ from DER, 715′ right of centerline, 91′ AGL/778′ MSL.

RWY 27: Multiple trees beginning 803′ from DER, 122′ left of centerline, up to 100′ AGL/994′ MSL. Tree 783′ from DER, 105′ right of centerline, 25′ AGL/725′ MSL. OL antenna 996′ from DER, 304′ right of centerline, 67′ AGL/767′ MSL. Light pole 1328′ from DER, 222′ left of centerline, 50′ AGL/747′ MSL. Building 2049′ from DER, 837′ right of centerline, 57′ AGL/761′ MSL. Flagpole 2333′ from DER, 199′ left of centerline, 78′ AGL/778′ MSL. Stack 1.8 NM from DER, 635′ left of centerline, 569′ AGL/1279′ MSL.

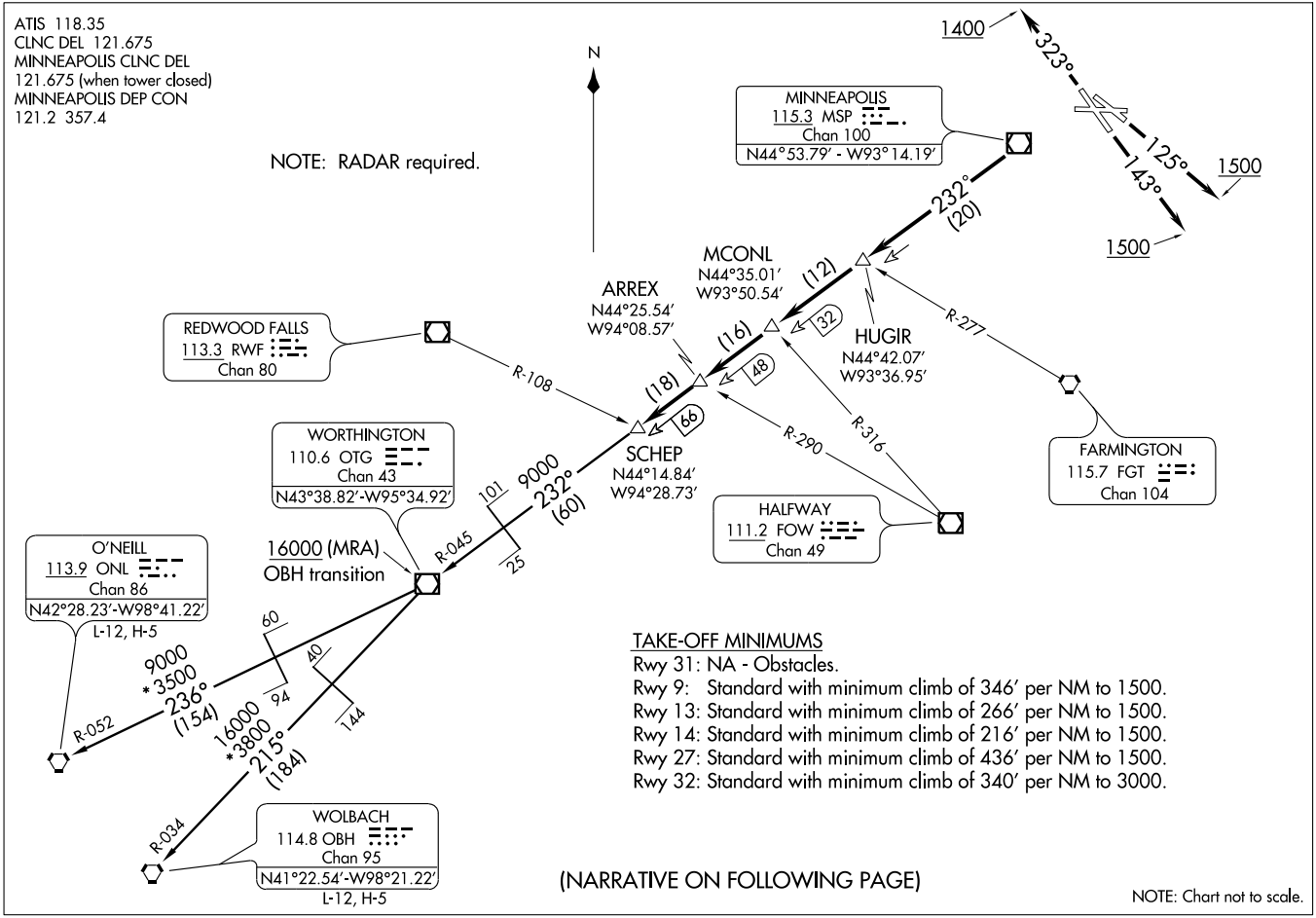
RWY 32: Road and vehicle 211′ from DER, 482′ left of centerline, 17′ AGL/717′ MSL. Railroad beginning 369′ from DER, 329′ left of centerline, up to 23′ AGL/727′ MSL. Pipe on DME 383′ from DER, 269′ right of centerline, 17′ AGL/722′ MSL. Tree 1152′ from DER, 209′ left of centerline, 44′ AGL/744′ MSL. Tree 1685′ from DER, 277′ right of centerline, 75′ AGL/770′ MSL. Sign 5668′ from DER, 1924′ left of centerline, 86′ AGL/874′ MSL. Trees 5614′ from DER, 1796′ right of centerline, 100′ AGL/939′ MSL. Building 5779′ from DER, 1733′ right of centerline, 72′ AGL/910′ MSL. Pole 1 NM from DER, 1835′ right of centerline, 157′ AGL/973′ MSL. Building 1.1 NM from DER, 2170′ left of centerline, 122′ AGL/886′ MSL. Multiple buildings beginning 1.1 NM from DER, 378′ left of centerline, up to 142′ AGL/918′ MSL.

SCHEP THREE DEPARTURE

(SCHEP3.SCHEP) 10154

ST. PAUL, MINNESOTA

ST. PAUL DOWNTOWN HOLMAN FIELD (STP)



SCHEP THREE DEPARTURE

(SCHEP3.SCHEP) 10154

ST. PAUL DOWNTOWN HOLMAN FIELD (STP)

SL-263 (FAA)

ST. PAUL, MINNESOTA

NC-1, 21 OCT 2010 to 18 NOV 2010

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF RUNWAYS 9, 27: Fly assigned heading and altitude for radar vectors to MSP VOR/DME then via MSP R-232 to SCHEP INT/MSP 66 DME,
Thence . . . .

TAKE-OFF RUNWAY 13: Climb heading 125° to 1500 for radar vectors to MSP VOR/DME then via MSP R-232 to SCHEP INT/MSP 66 DME,
Thence . . . .

TAKE-OFF RUNWAY 14: Climb heading 143° to 1500 for radar vectors to MSP VOR/DME then via MSP R-232 to SCHEP INT/MSP 66 DME,
Thence . . . .

TAKE-OFF RUNWAY 32: Climb heading 323° to 1400 for radar vectors to MSP VOR/DME then via MSP R-232 to SCHEP INT/MSP 66 DME,
Thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

O'NEILL TRANSITION (SCHEP3.ONL): From over SCHEP INT via OTG R-045 to OTG VOR/DME, then via OTG R-236 and ONL R-052 to ONL VORTAC.

WOLBACH TRANSITION (SCHEP3.OBH): From over SCHEP INT via OTG R-045 to OTG VOR/DME, then via OTG R-215 and OBH R-034 to OBH VORTAC.

TAKE-OFF OBSTACLE NOTES:

RWY 9: Multiple trees beginning 1265′ from DER, 167′ right of centerline, up to 75′ AGL/1055′ MSL. Multiple trees beginning 1.1 NM from DER, 124′ left of centerline, up to 100′ AGL/1099′ MSL. OL tank 1571′ from DER, 771′ right of centerline, 50′ AGL/811′ MSL. Mobile crane 1163′ from DER, 123′ left of centerline, 50′ AGL/758′ MSL.

RWY 13: OL stack 2695′ from DER, 842′ right of centerline, 50′ AGL/820′ MSL. Tree 1563′ from DER, 25′ right of centerline, 61′ AGL/748′ MSL. Multiple trees beginning 1004′ from DER, 607′ left of centerline, 50′ AGL/767′ MSL. Tower 1725′ from DER, 930′ left of centerline, 47′ AGL/753′ MSL. Vent on building 3029′ from DER, 629′ right of centerline, 10′ AGL/783′ MSL. Multiple bushes beginning 194′ from DER, 88′ left of centerline, 7′ AGL/712′ MSL. Stack 1879′ from DER, 25′ left of centerline, 51′ AGL/751′ MSL.

RWY 14: Multiple trees beginning 805′ from DER, 2′ right of centerline, up to 112′ AGL/811′ MSL. Multiple trees beginning 1205′ from DER, 64′ left of centerline, up to 80′ AGL/770′ MSL. Poles 2810′ from DER, 715′ right of centerline, 91′ AGL/778′ MSL.

RWY 27: Multiple trees beginning 803′ from DER, 122′ left of centerline, up to 100′ AGL/994′ MSL. Tree 783′ from DER, 105′ right of centerline, 25′ AGL/725′ MSL. OL antenna 996′ from DER, 304′ right of centerline, 67′ AGL/767′ MSL. Light pole 1328′ from DER, 222′ left of centerline, 50′ AGL/747′ MSL. Building 2049′ from DER, 837′ right of centerline, 57′ AGL/761′ MSL. Flagpole 2333′ from DER, 199′ left of centerline, 78′ AGL/778′ MSL. Stack 1.8 NM from DER, 635′ left of centerline, 569′ AGL/1279′ MSL.

RWY 32: Road and vehicle 211′ from DER, 482′ left of centerline, 17′ AGL/717′ MSL. Railroad beginning 369′ from DER, 329′ left of centerline, up to 23′ AGL/727′ MSL. Pipe on DME 383′ from DER, 269′ right of centerline, 17′ AGL/722′ MSL. Tree 1152′ from DER, 209′ left of centerline, 44′ AGL/744′ MSL. Tree 1685′ from DER, 277′ right of centerline, 75′ AGL/770′ MSL. Sign 5668′ from DER, 1924′ left of centerline, 86′ AGL/874′ MSL. Trees 5614′ from DER, 1796′ right of centerline, 100′ AGL/939′ MSL. Building 5779′ from DER, 1733′ right of centerline, 72′ AGL/910′ MSL. Pole 1 NM from DER, 1835′ right of centerline, 157′ AGL/973′ MSL. Building 1.1 NM from DER, 2170′ left of centerline, 122′ AGL/886′ MSL. Multiple buildings beginning 1.1 NM from DER, 378′ left of centerline, up to 142′ AGL/918′ MSL.

TWOLF TWO ARRIVAL

ST-264 (FAA)

MINNEAPOLIS, MINNESOTA

NC-1, 21 OCT 2010 to 18 NOV 2010

MINNEAPOLIS APP CON
126.95 335.5
118.72 (MSP RWY 35)
MINNEAPOLIS ATIS
135.35 239.275
ANOKA COUNTY ATIS 120.625
CRYSTAL ATIS 124.475
FLYING CLOUD ATIS 124.9
ST. PAUL DOWNTOWN ATIS
118.35

L.O. SIMENSTAD MUNI

ANOKA COUNTY-BLAINE AIRPORT
(JANES FIELD)

NEW RICHMOND RGNL

GOPHER
117.3 GEP
Chan 120

CRYSTAL

ST. PAUL DOWNTOWN HOLMAN FIELD

FLYING CLOUD

300°

MINNEAPOLIS-ST. PAUL INTL/
WOLD CHAMBERLAIN

FLYING CLOUD
117.7 FCM
Chan 124
N44°49.54′-W93°27.41′

R-180

R-178

R-103

SLIKK
N44°47.90′
W93°17.21′

330°
(11)

AIRLAKE

FARMINGTON
115.7 FGT
Chan 104
N44°37.86′-W93°10.92′

TRGET
N44°13.88′-W93°27.73′

VERTICAL NAVIGATION
PLANNING INFORMATION

MSP: Expect clearance to cross at 11000.
All other airports:
Turbojets: Expect clearance to cross at 8000.
Turboprops: Expect clearance to cross at 7000.

5000
(36)
360°

(8)

R-201

GDNEE
N44°30.68′
W93°15.98′

17

(9)

55

PIKKL
N44°22.82′
W93°21.49′

021°
5000
(10)

R-081

6000

62

(7)

MANKATO
110.8 MKT
Chan 45

LYNKS
N44°06.89′
W93°28.39′

8000
(22)

84

KGEEE
N43°44.94′
W93°30.47′

12000
358°
(28)

112

TWOLF
N43°17.00′
W93°33.09′

FORT DODGE
113.5 FOD
Chan 82
N42°36.67′-W94°17.69′
L-12, H-5

12000
032°
(30)

52

R-178
GEP

NOTE: DME and RADAR Required.

12000
*2900
032°
(22)

TICKT
N42°53.71′
W93°59.01′

(NARRATIVE ON FOLLOWING PAGE)

NOTE: Chart not to scale.

TWOLF TWO ARRIVAL

MINNEAPOLIS, MINNESOTA

(TWOLF.TWOLF2) 10154

ARRIVAL DESCRIPTION

FORT DODGE TRANSITION (FOD.TWOLF2): From over FOD VORTAC via FOD R-032 to TWOLF/FOD 52 DME, Thence . . . .

....From over TWOLF/GEP 112 DME via GEP R-178 to KGEEE/GEP 84 DME, then as depicted to TRGET INT/GEP 55 DME. Thence....

LANDING MSP RWYS 12L/R: From over TRGET INT via FGT R-201 to FGT VORTAC, then via FGT R-330 to SLIKK INT/FGT 11 DME, then via heading 300° for radar vectors to final approach course.

LANDING MSP RWYS 30L/R, 4, 22, 17, 35: From over TRGET INT via FGT R-201 to FGT VORTAC, then via radar vectors to final approach course.

LANDING ALL OTHER AIRPORTS: From over TRGET INT via FCM R-180 to FCM VOR/DME, then expect radar vectors to final approach course.

NC-1, 21 OCT 2010 to 18 NOV 2010

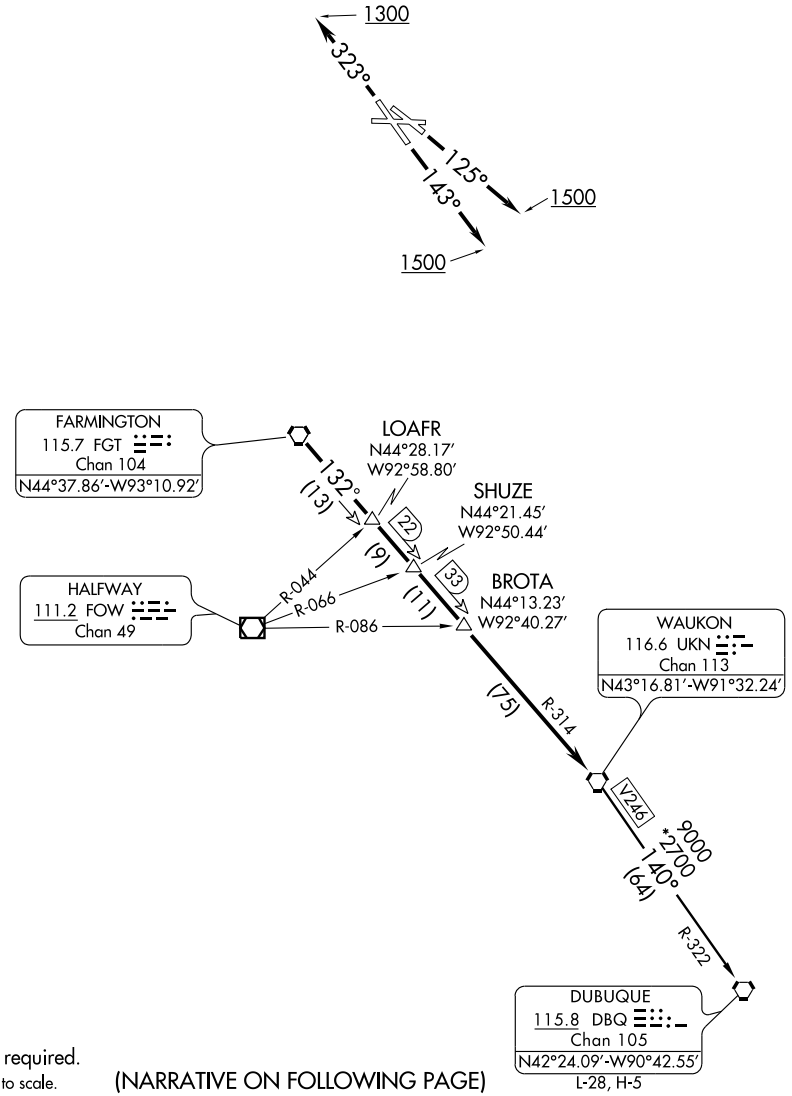
WAUKON THREE DEPARTURE

ST. PAUL DOWNTOWN HOLMAN FIELD (STP)
SL-263 (FAA)
ST. PAUL, MINNESOTA

TAKE-OFF MINIMUMS

Rwy 9: Standard with minimum climb of 346′ per NM to 1500.
Rwy 13: Standard with minimum climb of 266′ per NM to 1500.
Rwy 14: Standard with minimum climb of 216′ per NM to 1500.
Rwy 27: Standard with minimum climb of 436′ per NM to 1500.
Rwy 31: NA - Obstacles.
Rwy 32: Standard with minimum climb of 340′ per NM to 3000.

ATIS 118.35
CLNC DEL
121.675
MINNEAPOLIS CLNC DEL
121.675 (when tower closed)
MINNEAPOLIS DEP CON
121.2 357.4
ST. PAUL TOWER ★
119.1 (CTAF) 257.8



NOTE: RADAR required.
NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

L-28, H-5

NC-1, 21 OCT 2010 to 18 NOV 2010

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF RUNWAYS 9, 27: Fly assigned heading and altitude for radar vectors to FGT VORTAC then via FGT R-132 and UKN R-314 to UKN VORTAC, thence . . . .

TAKE-OFF RUNWAY 13: Climb heading 125° to 1500 for radar vectors to FGT VORTAC then via FGT R-132 and UKN R-314 to UKN VORTAC, thence . . . .

TAKE-OFF RUNWAY 14: Climb heading 143° to 1500 for radar vectors to FGT VORTAC then via FGT R-132 and UKN R-314 to UKN VORTAC, thence . . . .

TAKE-OFF RUNWAY 32: Climb heading 323° to 1300 for radar vectors to FGT VORTAC then via FGT R-132 and UKN R-314 to UKN VORTAC, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

DUBUQUE TRANSITION (UKN3.DBQ): From over UKN VORTAC via UKN R-140 and DBQ R-322 to DBQ VORTAC.

TAKE-OFF OBSTACLE NOTES

RWY 9: Multiple trees beginning 1265′ from DER, 167′ right of centerline, up to 75′ AGL/1055′ MSL.
Multiple trees beginning 1.1 NM from DER, 124′ left of centerline, up to 100′ AGL/1099′ MSL.
OL tank 1571′ from DER, 771′ right of centerline, 50′ AGL/811′ MSL.
Mobile crane 1163′ from DER, 123′ left of centerline, 50′ AGL/758′ MSL.

RWY 13: OL stack 2695′ from DER, 842′ right of centerline, 50′ AGL/820′ MSL.
Tree 1563′ from DER, 25′ right of centerline, 61′ AGL/748′ MSL.
Multiple trees beginning 1004′ from DER, 607′ left of centerline, 50′ AGL/767′ MSL.
Tower 1725′ from DER, 930′ left of centerline, 47′ AGL/753′ MSL
Vent on building 3029′ from DER, 629′ right of centerline, 10′ AGL/783′ MSL.
Multiple bushes beginning 194′ from DER, 88′ left of centerline, 7′ AGL/712′ MSL.
Stack 1879′ from DER, 25′ left of centerline, 51′ AGL/751′ MSL.

RWY 14: Multiple trees beginning 805′ from DER, 2′ right of centerline, up to 112′ AGL/811′ MSL.
Multiple trees beginning 1205′ from DER, 64′ left of centerline, up to 80′ AGL/770′ MSL.
Poles 2810′ from DER, 715′ right of centerline, 91′ AGL/778′ MSL.

RWY 27: Multiple trees beginning 803′ from DER, 122′ left of centerline, up to 100′ AGL/994′ MSL.
Tree 783′ from DER, 105′ right of centerline, 25′ AGL/725′ MSL.
OL antenna 996′ from DER, 304′ right of centerline, 67′ AGL/767′ MSL.
Light pole 1328′ from DER, 222′ left of centerline, 50′ AGL/747′ MSL.
Building 2049′ from DER, 837′ right of centerline, 57′ AGL/761′ MSL.
Flagpole 2333′ from DER, 199′ left of centerline, 78′ AGL/778′ MSL.
Stack 1.8 NM from DER, 635′ left of centerline, 569′ AGL/1279′ MSL.

RWY 32: Road and vehicle 211′ from DER, 482′ left of centerline, 17′ AGL/717′ MSL.
Railroad beginning 369′ from DER, 329′ left of centerline, up to 23′ AGL/727′ MSL.
Pipe on DME 383′ from DER, 269′ right of centerline, 17′ AGL/722′ MSL.
Tree 1152′ from DER, 209′ left of centerline, 44′ AGL/744′ MSL.
Tree 1685′ from DER, 277′ right of centerline, 75′ AGL/770′ MSL.
Sign 5668′ from DER, 1924′ left of centerline, 86′ AGL/874′ MSL.
Trees 5614′ from DER, 1796′ right of centerline, 100′ AGL/939′ MSL.
Building 5779′ from DER, 1733′ right of centerline, 72′ AGL/910′ MSL.
Pole 1 NM from DER, 1835′ right of centerline, 157′ AGL/973′ MSL.
Building 1.1 NM from DER, 2170′ left of centerline, 122′ AGL/886′ MSL.
Multiple buildings beginning 1.1 NM from DER, 378′ left of centerline, up to 142′ AGL/918′ MSL.

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

TAKE-OFF MINIMUMS

Rwy 9: Standard with minimum climb of 346' per NM to 1500.
Rwy 13: Standard with minimum climb of 266' per NM to 1500.
Rwy 14: Standard with minimum climb of 216' per NM to 1500.
Rwy 27: Standard with minimum climb of 436' per NM to 1500.
Rwy 31: NA-obstacles.
Rwy 32: Standard with minimum climb of 340' per NM to 3000.

(NARRATIVE ON FOLLOWING PAGE)

WLSTN THREE DEPARTURE
(WLSTN3.WLSTN) 10042
ST. PAUL, MINNESOTA
ST. PAUL DOWNTOWN HOLMAN FIELD (STP)
NC-1, 21 OCT 2010 to 18 NOV 2010

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF RUNWAYS 9, 27: Fly assigned heading and altitude for radar vectors to GEP R-072 to WLSTN/GEP 102 DME, thence . . . .

TAKE-OFF RUNWAY 13: Climb heading 125° to 1500 for radar vectors to GEP R-072 to WLSTN/GEP 102 DME, thence . . . .

TAKE-OFF RUNWAY 14: Climb heading 143° to 1500 for radar vectors to GEP R-072 to WLSTN/GEP 102 DME, thence . . . .

TAKE-OFF RUNWAY 32: Climb heading 323° to 1400 for radar vectors to GEP R-072 to WLSTN/GEP 102 DME, thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

GREEN BAY TRANSITION (WLSTN3.GRB): From over WLSTN via GRB R-295 to GRB VORTAC.

TAKE-OFF OBSTACLE NOTES

RWY 9: Multiple trees beginning 1265′ from DER, 167′ right of centerline, up to 75′ AGL/1055′ MSL.
Multiple trees beginning 1.1 NM from DER, 124′ left of centerline, up to 100′ AGL/1099′ MSL.
OL tank 1571′ from DER, 771′ right of centerline, 50′ AGL/811′ MSL.
Mobile crane 1163′ from DER, 123′ left of centerline, 50′ AGL/758′ MSL.

RWY 13: OL stack 2695′ from DER, 842′ right of centerline, 50′ AGL/820′ MSL.
Tree 1563′ from DER, 25′ right of centerline, 61′ AGL/748′ MSL.
Multiple trees beginning 1004′ from DER, 607′ left of centerline, 50′ AGL/767′ MSL.
Tower 1725′ from DER, 930′ left of centerline, 47′ AGL/753′ MSL.
Vent on building 3029′ from DER, 629′ right of centerline, 10′ AGL/783′ MSL.
Multiple bushes beginning 194′ from DER, 88′ left of centerline, 7′ AGL/712′ MSL.
Stack 1879′ from DER, 25′ left of centerline, 51′ AGL/751′ MSL.

RWY 14: Multiple trees beginning 805′ from DER, 2′ right of centerline, up to 112′ AGL/811′ MSL.
Multiple trees beginning 1205′ from DER, 64′ left of centerline, up to 80′ AGL/770′ MSL.
Poles 2810′ from DER, 715′ right of centerline, 91′ AGL/778′ MSL.

RWY 27: Multiple trees beginning 803′ from DER, 122′ left of centerline, up to 100′ AGL/994′ MSL.
Tree 783′ from DER, 105′ right of centerline, 25′ AGL/725′ MSL.
OL antenna 996′ from DER, 304′ right of centerline, 67′ AGL/767′ MSL.
Light pole 1328′ from DER, 222′ left of centerline, 50′ AGL/747′ MSL.
Building 2049′ from DER, 837′ right of centerline, 57′ AGL/761′ MSL.
Flagpole 2333′ from DER, 199′ left of centerline, 78′ AGL/778′ MSL.
Stack 1.8 NM from DER, 635′ left of centerline, 569′ AGL/1279′ MSL.

RWY 32: Road and vehicle 211′ from DER, 482′ left of centerline, 17′ AGL/717′ MSL.
Railroad beginning 369′ from DER, 329′ left of centerline, up to 23′ AGL/727′ MSL.
Pipe on DME 383′ from DER, 269′ right of centerline, 17′ AGL/722′ MSL.
Tree 1152′ from DER, 209′ left of centerline, 44′ AGL/744′ MSL.
Tree 1685′ from DER, 277′ right of centerline, 75′ AGL/770′ MSL.
Sign 5668′ from DER, 1924′ left of centerline, 86′ AGL/874′ MSL.
Trees 5614′ from DER, 1796′ right of centerline, 100′ AGL/939′ MSL.
Building 5779′ from DER, 1733′ right of centerline, 72′ AGL/910′ MSL.
Pole 1 NM from DER, 1835′ right of centerline, 157′ AGL/973′ MSL.
Building 1.1 NM from DER, 2170′ left of centerline, 122′ AGL/886′ MSL.
Multiple buildings beginning 1.1 NM from DER, 378′ left of centerline, up to 142′ AGL/918′ MSL.

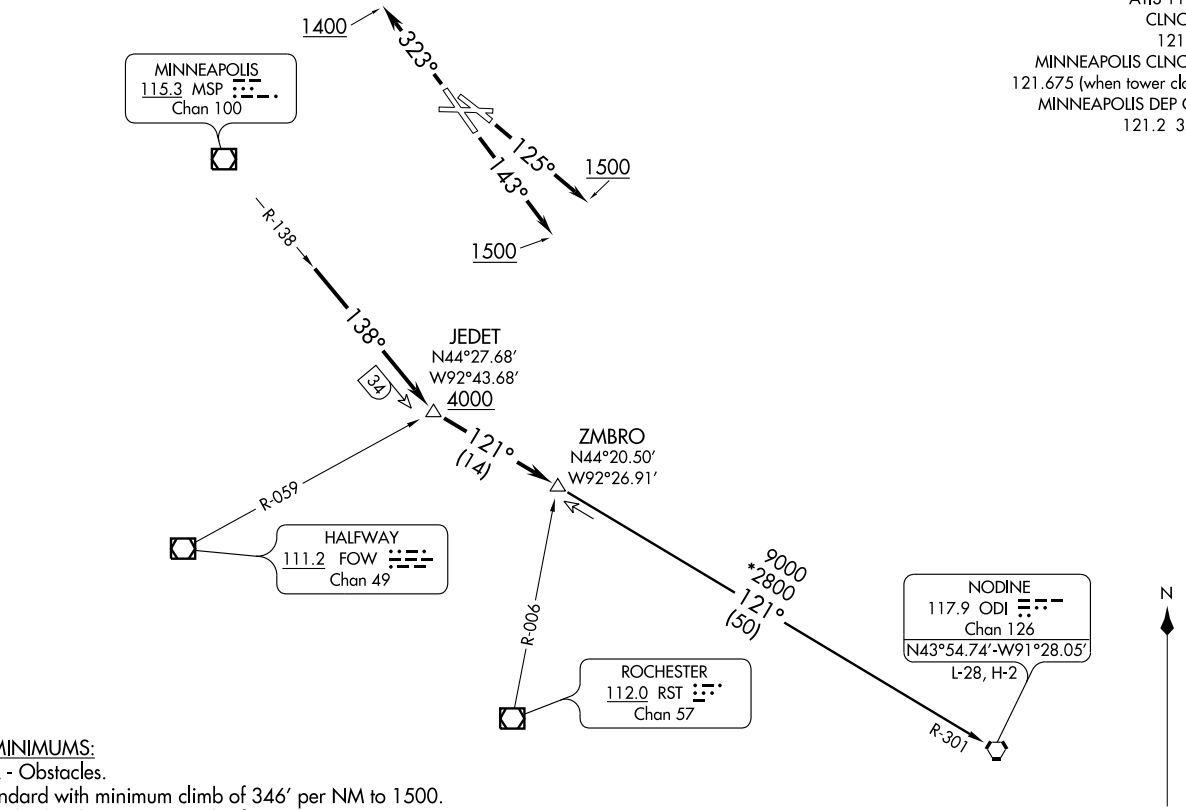
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

ZMBRO THREE DEPARTURE

(ZMBRO3.ZMBRO) 10042

ST. PAUL DOWNTOWN HOLMAN FIELD (STP)

ST. PAUL, MINNESOTA



ZMBRO THREE DEPARTURE

(ZMBRO3.ZMBRO) 10042

ST. PAUL DOWNTOWN HOLMAN FIELD (STP)

ST. PAUL, MINNESOTA

SL-263 (FAA)

NC-1, 21 OCT 2010 to 18 NOV 2010

DEPARTURE ROUTE DESCRIPTON

TAKE-OFF RUNWAYS 9, 27: Fly assigned heading and altitude for radar vectors to MSP VOR/DME then via MSP R-138 to JEDET INT/MSP 34 DME, at or above 4000; then via ODI R-301 to ZMBRO INT/ODI 50 DME, Thence . . . .

TAKE-OFF RUNWAY 13: Climb heading 125° to 1500 for radar vectors to MSP VOR/DME then via MSP R-138 to JEDET INT/MSP 34 DME, at or above 4000; then via ODI R-301 to ZMBRO INT/ODI 50 DME, Thence . . . .

TAKE-OFF RUNWAY 14: Climb heading 143° to 1500 for radar vectors to MSP VOR/DME then via MSP R-138 to JEDET INT/MSP 34 DME, at or above 4000; then via ODI R-301 to ZMBRO INT/ODI 50 DME, Thence . . . .

TAKE-OFF RUNWAY 32: Climb heading 323° to 1400 for radar vectors to MSP VOR/DME then via MSP R-138 to JEDET INT/MSP 34 DME, at or above 4000; then via ODI R-301 to ZMBRO INT/ODI 50 DME, Thence . . . .

. . . . via transition or assigned route. Expect clearance to filed altitude/flight level 10 (ten) minutes after departure.

NODINE TRANSITION (ZMBRO3.ODI): From over ZMBRO INT via ODI R-301 to ODI VORTAC.

TAKE-OFF OBSTACLE NOTES:

RWY 9: Multiple trees beginning 1265′ from DER, 167′ right of centerline, up to 75′ AGL/1055′ MSL. Multiple trees beginning 1.1 NM from DER, 124′ left of centerline, up to 100′ AGL/1099′ MSL. OL tank 1571′ from DER, 771′ right of centerline, 50′ AGL/811′ MSL. Mobile crane 1163′ from DER, 123′ left of centerline, 50′ AGL/758′ MSL.

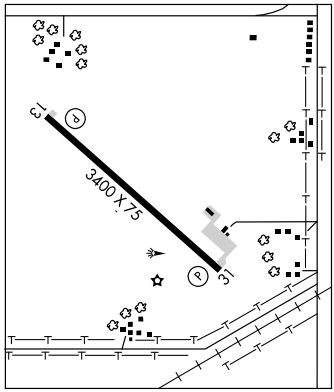
RWY 13: OL stack 2695′ from DER, 842′ right of centerline, 50′ AGL/820′ MSL. Tree 1563′ from DER, 25′ right of centerline, 61′ AGL/748′ MSL. Multiple trees beginning 1004′ from DER, 607′ left of centerline, 50′ AGL/767′ MSL. Tower 1725′ from DER, 930′ left of centerline, 47′ AGL/753′ MSL. Vent on building 3029′ from DER, 629′ right of centerline, 10′ AGL/783′ MSL. Multiple bushes beginning 194′ from DER, 88′ left of centerline, 7′ AGL/712′ MSL. Stack 1879′ from DER, 25′ left of centerline, 51′ AGL/751′ MSL.

RWY 14: Multiple trees beginning 805′ from DER, 2′ right of centerline, up to 112′ AGL/811′ MSL. Multiple trees beginning 1205′ from DER, 64′ left of centerline, up to 80′ AGL/770′ MSL. Poles 2810′ from DER, 715′ right of centerline, 91′ AGL/778′ MSL.

RWY 27: Multiple trees beginning 803′ from DER, 122′ left of centerline, up to 100′ AGL/994′ MSL. Tree 783′ from DER, 105′ right of centerline, 25′ AGL/725′ MSL. OL antenna 996′ from DER, 304′ right of centerline, 67′ AGL/767′ MSL. Light pole 1328′ from DER, 222′ left of centerline, 50′ AGL/747′ MSL. Building 2049′ from DER, 837′ right of centerline, 57′ AGL/761′ MSL. Flagpole 2333′ from DER, 199′ left of centerline, 78′ AGL/778′ MSL. Stack 1.8 NM from DER, 635′ left of centerline, 569′ AGL/1279′ MSL.

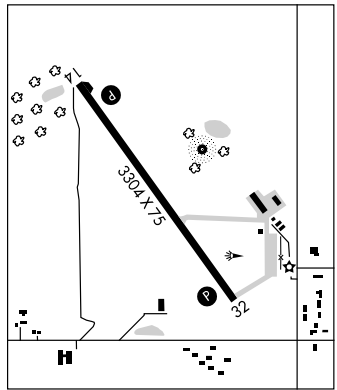
RWY 32: Road and vehicle 211′ from DER, 482′ left of centerline, 17′ AGL/717′ MSL. Railroad beginning 369′ from DER, 329′ left of centerline, up to 23′ AGL/727′ MSL. Pipe on DME 383′ from DER, 269′ right of centerline, 17′ AGL/722′ MSL. Tree 1152′ from DER, 209′ left of centerline, 44′ AGL/744′ MSL. Tree 1685′ from DER, 277′ right of centerline, 75′ AGL/770′ MSL. Sign 5668′ from DER, 1924′ left of centerline, 86′ AGL/874′ MSL. Trees 5614′ from DER, 1796′ right of centerline, 100′ AGL/939′ MSL. Building 5779′ from DER, 1733′ right of centerline, 72′ AGL/910′ MSL. Pole 1 NM from DER, 1835′ right of centerline, 157′ AGL/973′ MSL. Building 1.1 NM from DER, 2170′ left of centerline, 122′ AGL/886′ MSL. Multiple buildings beginning 1.1 NM from DER, 378′ left of centerline, up to 142′ AGL/918′ MSL.

SPRINGFIELD MUNI (D42) 1 SW UTC−6(−5DT) N44°13.86′ W94°59.94′ OMAHA
1072 B **FUEL** 100LL NOTAM FILE PNM L–12I
RWY 13–31: H3400X75 (ASPH) S–12 MIRL IAP
RWY 13: REIL. PAPI(P2L)—GA 3.0° TCH 20′. Road. Rgt tfc.
RWY 31: REIL. PAPI(P2L)—GA 3.0° TCH 20′.
AIRPORT REMARKS: Attended Mon–Fri 1430–2200Z‡, Sat 1430–1800Z‡. For svc after hrs call 507–723–3514 or 8881. Ultralight tfc on and invof arpt. Rwy 13–31 2″ cracks at sawcuts with secondary cracking. MIRL Rwy 13–31 preset on low ints, to increase ints—CTAF. PAPI Rwy 13 and Rwy 31 on continuously. REIL Rwy 13 and Rwy 31 5 clicks med and 7 clicks high, 3 clicks off.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.1
RADIO AIDS TO NAVIGATION: NOTAM FILE RWF.
REDWOOD FALLS (H) VORW/DME 113.3 RWF Chan 80
N44°28.04′ W95°07.69′
152° 15.2 NM to fld. 1061/7E. **HIWAS.**



STANTON AIRFIELD (SYN) 1 E UTC−6(−5DT) N44°28.53′ W93°00.98′ OMAHA
920 S4 **FUEL** 100LL, MOGAS TPA—1720(800) NOTAM FILE SYN
RWY 18–36: 2550X200 (TURF)
RWY 18: Hill. **RWY 36:** Thld dsplcd 300′. Road.
RWY 09–27: 1970X180 (TURF)
RWY 09: Trees. **RWY 27:** Road.
AIRPORT REMARKS: Attended 1400Z‡–SS. For svc 507–645–4030 or 612–652–2280. Arpt CLOSED ngts. Glider ops on and invof arpt, surface thru 8000′ MSL weekends during dalgt hrs, except winter months. Rwy 09–27 marked with yellow cones. Rwy 18–36 and dsplcd thld Rwy 36 marked with yellow cones.
WEATHER DATA SOURCES: AWOS–3 119.35 (507) 664–3806.
COMMUNICATIONS: CTAF/UNICOM 122.8

STAPLES MUNI (SAZ) 2 NW UTC−6(−5DT) N46°22.85′ W94°48.40′ TWIN CITIES
1287 B **FUEL** 100LL NOTAM FILE SAZ L–14H
RWY 14–32: H3304X75 (ASPH) MIRL IAP
RWY 14: REIL. PAPI(P4L)—GA 3.0° TCH 27′. Road.
RWY 32: REIL. PAPI(P4L)—GA 3.0° TCH 27′. Road.
AIRPORT REMARKS: Unattended. Self serve fuel available 24 hrs with credit card. Occasional helicopter ops hospital helipad .89 NM ESE Rwy 14–32. To increase intensity and ACTIVATE MIRL Rwy 14–32 and PAPI Rwy 14 and Rwy 32 and REIL Rwy 14 and Rwy 32—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.325 (218) 894–3666.
COMMUNICATIONS: CTAF 122.9
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 118.05
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE AXN.
ALEXANDRIA (L) VORW/DME 112.8 AXN Chan 75 N45°57.50′ W95°13.96′ 028° 31.0 NM to fld. 1367/7E. **HIWAS.**
NDB (MHW) 257 SAZ N46°22.94′ W94°48.30′ at fld. Unmonitored. NOTAM FILE SAZ.



NDB SAZ 257	APP CRS 133°	Rwy Idg 3304 TDZE 1287 Apt Elev 1287

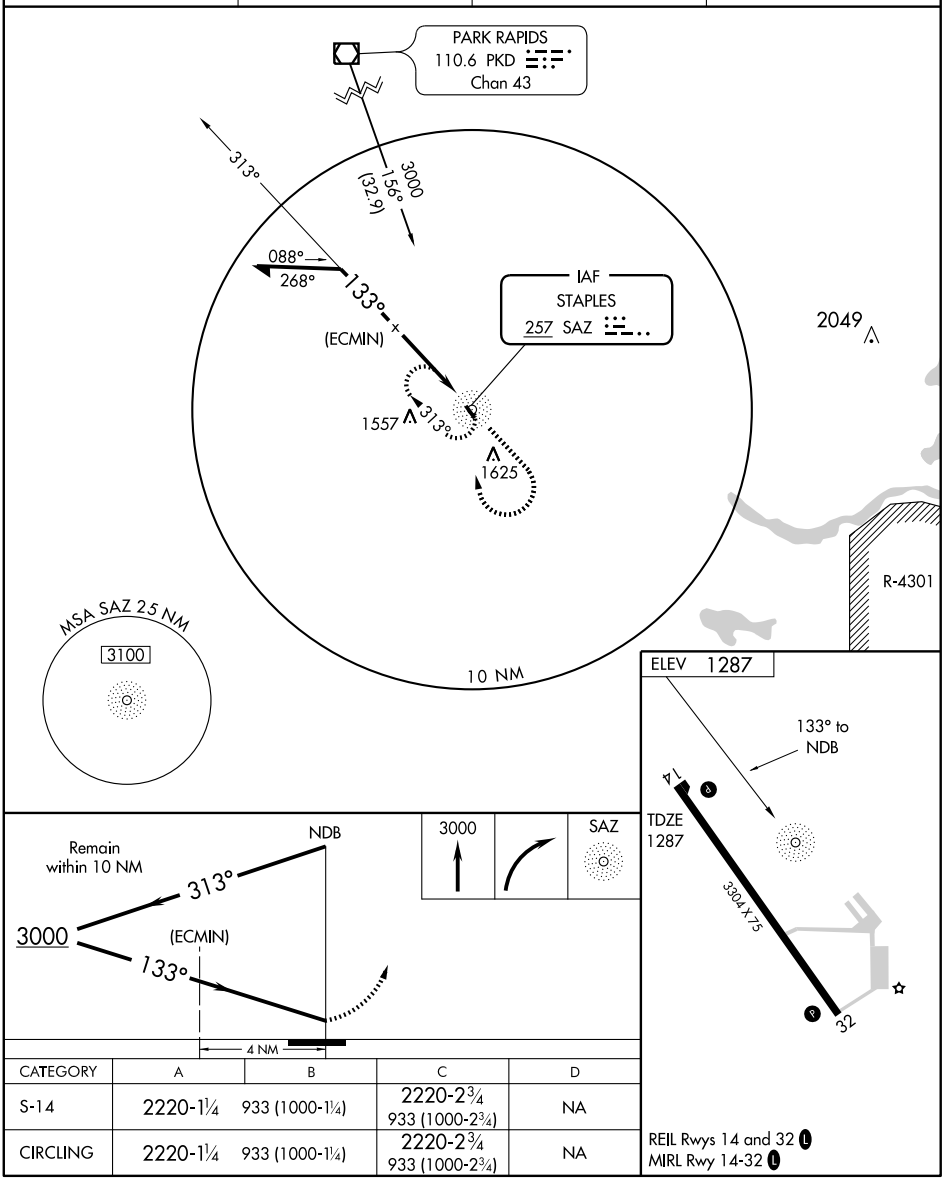
NDB or GPS RWY 14

STAPLES MUNI (SAZ)

NA

MISSED APPROACH: Climb to 3000 then right turn direct SAZ NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	CTAF
118.325	118.05 239.0	121.725	122.9 L



CATEGORY	A	B	C	D
S-14	2220-1¼	933 (1000-1¼)	2220-2¾ 933 (1000-2¾)	NA
CIRCLING	2220-1¼	933 (1000-1¼)	2220-2¾ 933 (1000-2¾)	NA

REIL Rwys 14 and 32 L
MIRL Rwy 14-32 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

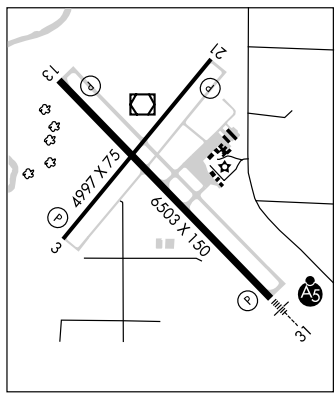
STARBUCK MUNI (D32) 1 S UTC−6(−5DT) N45°36.00′ W95°32.02′ **TWIN CITIES**
1141 B NOTAM FILE PNM
RWY 15–33: 2512X198 (TURF) LIRL (NSTD)
RWY 15: Tree. **RWY 33:** Trees.
AIRPORT REMARKS: Unattended. Ultralight acft on and invof arpt. Rwy 15–33 marked with yellow cones. Rwy 15–33 NSTD LIRL, NSTD spacing.
COMMUNICATIONS: CTAF 122.9

STEPHEN MUNI (D41) 1 NE UTC−6(−5DT) N48°27.50′ W96°51.77′ **TWIN CITIES**
830 B **FUEL** 100LL TPA—1630(800) NOTAM FILE PNM
RWY 17–35: H2700X60 (ASPH) LIRL
RWY 35: Road.
AIRPORT REMARKS: Attended dalgt hrs. Ultralight tfc on and invof arpt. Rwy 17–35 has rwy cracks. Antenna 1.85 SM southeast, 1,258′ MSL (418′AGL).
COMMUNICATIONS: CTAF/UNICOM 122.7

SURFSIDE SPB (See LINO LAKES)

TAMIE N45°47.50′ W95°18.33′ NOTAM FILE AXN. **TWIN CITIES**
NDB (MHW/LOM) 374 EE 316° 5.8 NM to Chandler Fld. **L–14H**

THIEF RIVER FALLS RGNL (TVF) 3 S UTC−6(−5DT) N48°03.94′ W96°11.10′ **TWIN CITIES**
1119 B S4 **FUEL** 100LL, JET A, A+ Class I, ARFF Index A NOTAM FILE TVF **H–2I, L–14H**
RWY 13–31: H6503X150 (ASPH–GRVD) S–75, D–90, 2S–114, 2D–155 HIRL **IAP**
RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 40′.
RWY 31: MALSR. PAPI(P4L)—GA 3.0° TCH 55′. Trees.
RWY 03–21: H4997X75 (ASPH–GRVD) D–30 MIRL
RWY 03: REIL. PAPI(P4L)—GA 3.0° TCH 34′
RWY 21: REIL. PAPI(P4L)—GA 3.0° TCH 34′



RUNWAY DECLARED DISTANCE INFORMATION

RWY 03:	TORA–4997	TODA–4997	ASDA–4997	LDA–4997
RWY 13:	TORA–6503	TODA–6503	ASDA–6503	LDA–6503
RWY 21:	TORA–4997	TODA–4997	ASDA–4997	LDA–4997
RWY 31:	TORA–6503	TODA–6503	ASDA–6503	LDA–6503

AIRPORT REMARKS: Attended 1200–0400Z‡. Birds on and invof arpt. Rwy 13–31 has severe pavement cracks and loose gravel. Rwy 03–21 CLOSED to air carrier ops with more than 9 passenger seats. 48 hr PPR for unscheduled air carrier ops with more than 30 passenger seats; call arpt manager 218–681–7680. Scheduled air carrier ops greater than 9 passenger seats in excess of 15 minutes from published times must ctc arpt to ensure ARFF is avbl prior to air carrier ops. ACTIVATE HIRL Rwy 13–31, MIRL Rwy 03–21, REIL Rwy 13, Rwy 03 and Rwy 21 and MALSR Rwy 31—CTAF.
WEATHER DATA SOURCES: AWOS–3 108.4 TVF (218) 681–1918.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 123.6R 122.1R 108.4T (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.15
AIRSPACE: CLASS E svc 1100–0300Z‡ other times CLASS G.
RADIO AIDS TO NAVIGATION: NOTAM FILE TVF.
(L) VOR/DME 108.4 TVF Chan 21 N48°04.16′ W96°11.19′ at fld. 1039/8E. **AWOS–3**. VOR portion unusable 325°–335°.
HARVI NDB (LOM) 260 HY N48°00.40′ W96°05.75′ 310° 5.0 NM to fld. Unmonitored.
ILS 110.5 I–HYZ Rwy 31 Class IE. LOM HARVI NDB. Unmonitored.

TODD FLD (See LONG PRAIRIE)

TONNA N44°04.43′ W93°09.32′ NOTAM FILE OWA. **OMAHA**
NDB (LOM) 379 OW 301° 5.2 NM to Owatonna Degner Rgnl.

LOC I-HYZ	APP CRS	Rwy Idg	6503
110.5	310°	TDZE	1115
		Apt Elev	1119

ILS or LOC RWY 31
THIEF RIVER FALLS RGNL (TVF)

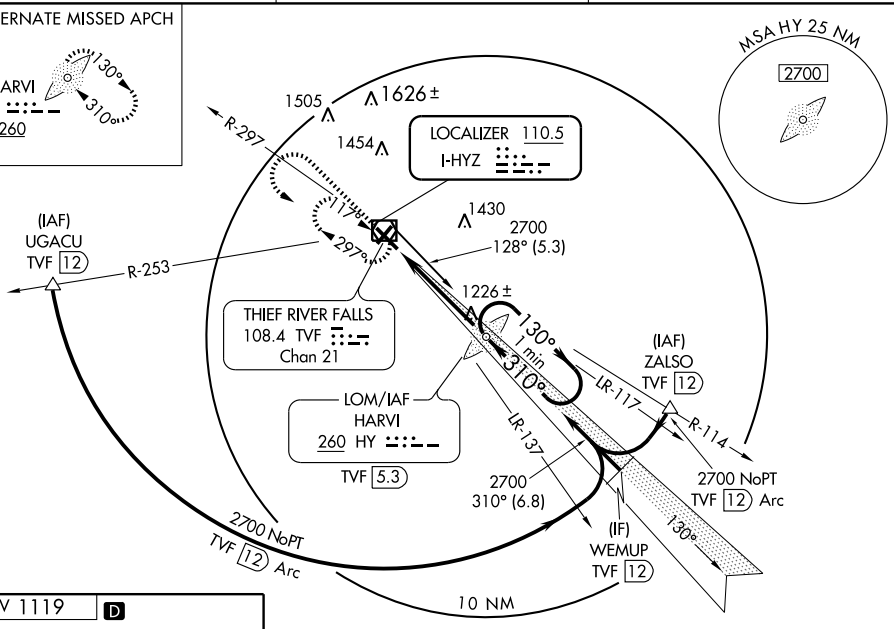
When local altimeter setting not received, use Crookston altimeter setting and increase all DA 82 feet, and all MDA 100 feet and increase S-LOC Cat C/D visibility ¼ mile. For inoperative MALSR when using Crookston altimeter setting, increase visibility S-ILS 31 all Cats to 1 mile. Circling to Rwy 3/21 NA.

MALSR

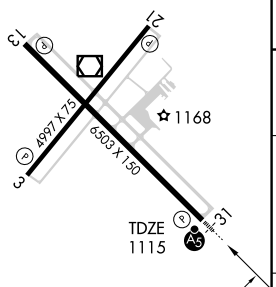
MISSED APPROACH: Climb to 2700 then left turn direct TVF VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.4	132.15 269.6	122.8 (CTAF)

ALTERNATE MISSED APCH FIX
HARVI
HY 260
130°
310°



ELEV 1119 D

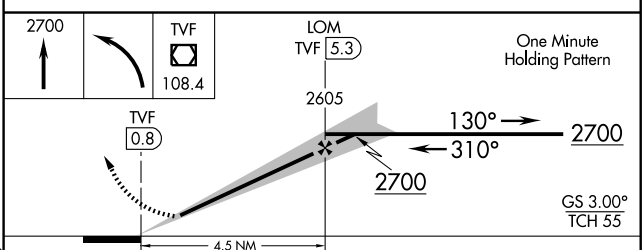


310° 4.5 NM from FAF

HIRL Rwy 13-31 L
MIRL Rwy 3-21 L
REIL Rwys 3, 13 and 21 L

FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

ADF or DME REQUIRED



CATEGORY	A	B	C	D
S-ILS 31	1315-½ 200 (200-½)			
S-LOC 31	1480-½ 365 (400-½)			1480-¾ 365 (400-¾)
CIRCLING	1540-1 421 (500-1)	1580-1 461 (500-1)	1580-1½ 461 (500-1½)	1680-2 561 (600-2)

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LOM HY	APP CRS	Rwy Idg	6503
260	309°	TDZE	1115
		Apt Elev	1119

NDB RWY 31

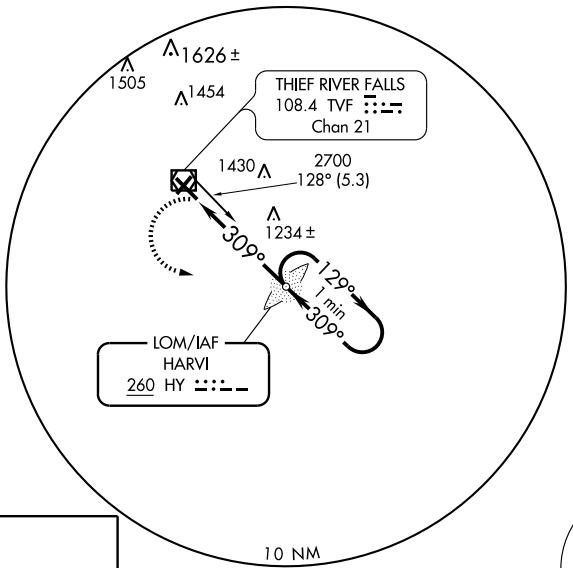
THIEF RIVER FALLS RGNL (TVF)

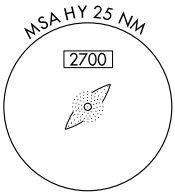
Circling to Rwy 3/21 NA.
When local altimeter setting not received, use Crookston altimeter setting and increase all MDA 100 feet and increase S-31 Cat C visibility ¼ mile and Cat D visibility ½ mile.

MALSR

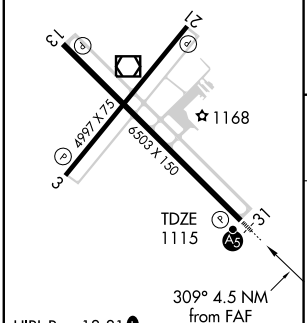
MISSED APPROACH: Climbing left turn to 2700 direct HY LOM and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.4	132.15 269.6	122.8 (CTAF) L





ELEV 1119 D

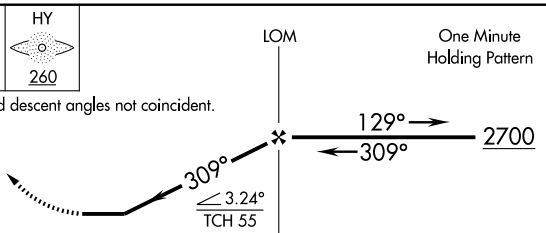


HIRL Rwy 13-31 L
MIRL Rwy 3-21 L
REIL Rwys 3, 13 and 21 L

FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

2700 HY 260

VGSI and descent angles not coincident.



CATEGORY	A	B	C	D
S-31	1540-¾ 425 (500-¾)			1540-1 425 (500-1)
CIRCLING	1540-1 421 (500-1)	1580-1 461 (500-1)	1580-1½ 461 (500-1½)	1680-2 561 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS		
CH **72711**	**130°**	Rwy Idg	**6503**
W13A		TDZE	**1115**
		Apt Elev	**1119**

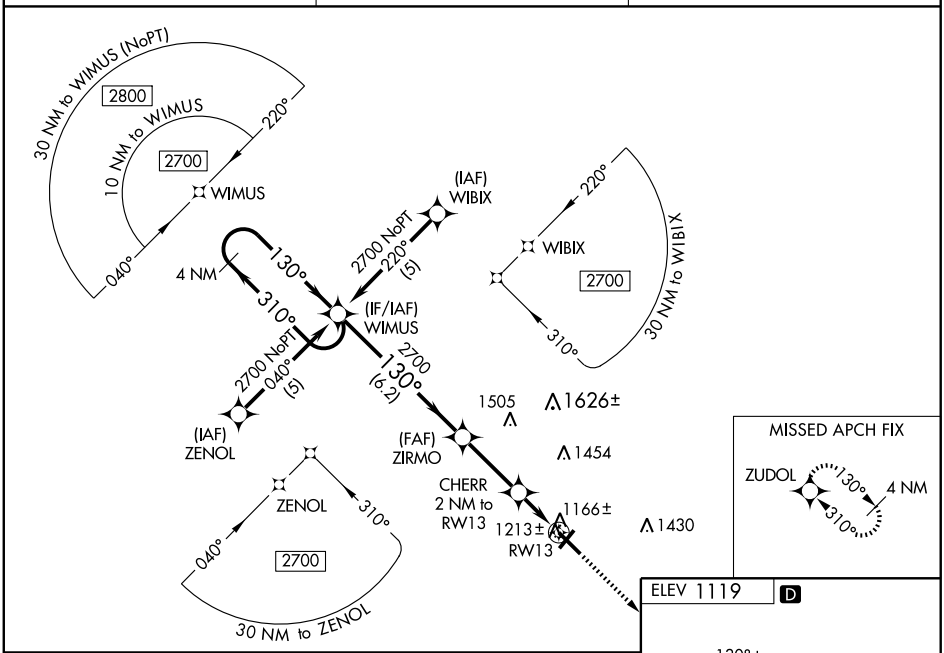
RNAV (GPS) RWY 13

THIEF RIVER FALLS RGNL (TVF)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Crookston altimeter setting and increase all DA 82 feet, and all MDA 100 feet and LPV and LNAV/VNAV all Cats and LNAV Cats C and D visibilities ¼ mile.
VDP and Baro-VNAV NA when using Crookston altimeter setting.
Circling to Rwy 3/21 NA.

MISSED APPROACH: Climb to 2700 direct ZUDOL and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.4	**132.15 269.6**	**122.8** (CTAF) L



CATEGORY	A	B	C	D
LPV DA	1365-1 250 (300-1)			
LNAV/VNAV DA	1436-1¼ 321 (400-1¼)			
LNAV MDA	1480-1 365 (400-1)			1480-1¼ 365 (400-1¼)
CIRCLING	1540-1 421 (500-1)	1580-1 461 (500-1)	1580-1½ 461 (500-1½)	1680-2 561 (600-2)

HIRL Rwy 13-31 L
MIRL Rwy 3-21 L
REIL Rwys 3, 13 and 21 L

NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	6503
CH 69311	310°	TDZE	1115
W31A		Apt Elev	1119

RNAV (GPS) RWY 31

THIEF RIVER FALLS RGNL (TVF)

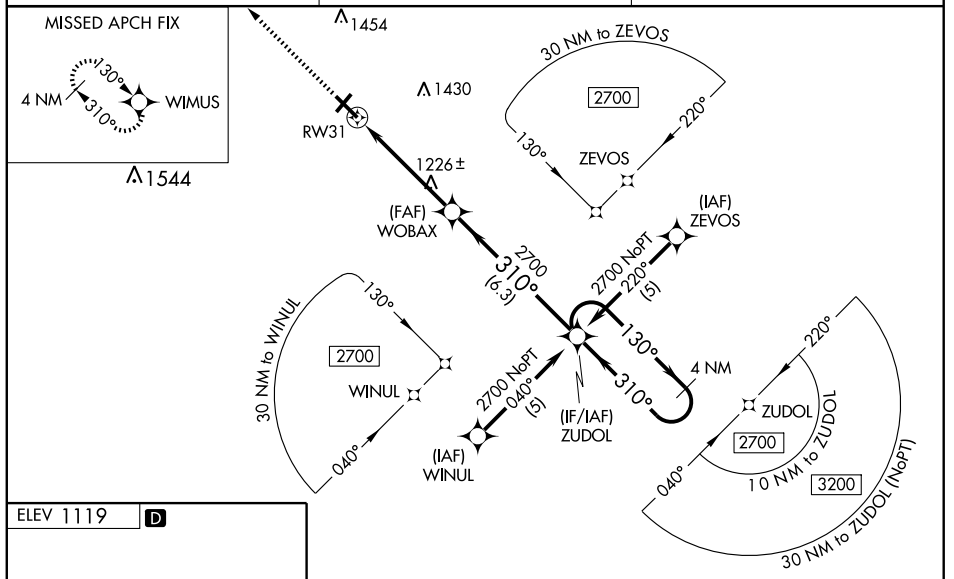
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.

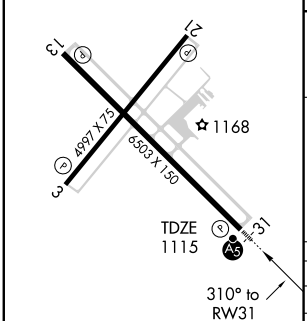
When local altimeter setting not received, use Crookston altimeter setting and increase all DA 82 feet, and all MDA 100 feet and LPV all Cats, LNAV/VNAV Cats A, B, and C and LNAV Cat C visibilities ¼ mile.
For inoperative MALSR when using Crookston altimeter setting, increase visibility LPV all Cats to 1¼ mile.
For inoperative MALSR increase visibility LNAV/VNAV Cat D to 1 mile and increase visibility LNAV Cat D to 1¼ mile.
VDP and Baro-VNAV NA when using Crookston altimeter setting.
Circling to Rwy 3/21 NA.

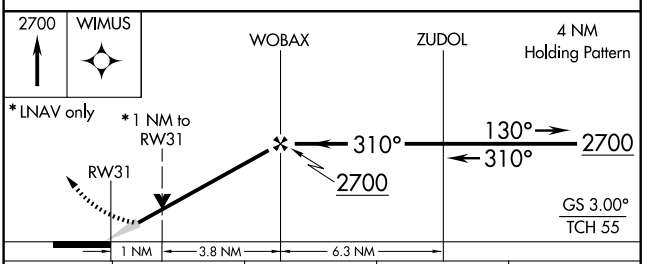
MALSR

MISSED APPROACH: Climb to 2700 direct WIMUS and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.4	132.15 269.6	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1365-½ 250 (300-½)			
LNAV/VNAV DA	1427-½ 312 (400-½)			1427-¾ 312 (400-¾)
LNAV MDA	1500-½ 385 (400-½)			1500-1 385 (400-1)
CIRCLING	1540-1 421 (500-1)	1580-1 461 (500-1)	1580-1½ 461 (500-1½)	1680-2 561 (600-2)

HIRL Rwy 13-31 L
MIRL Rwy 3-21 L
REIL Rwys 3, 13 and 21 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

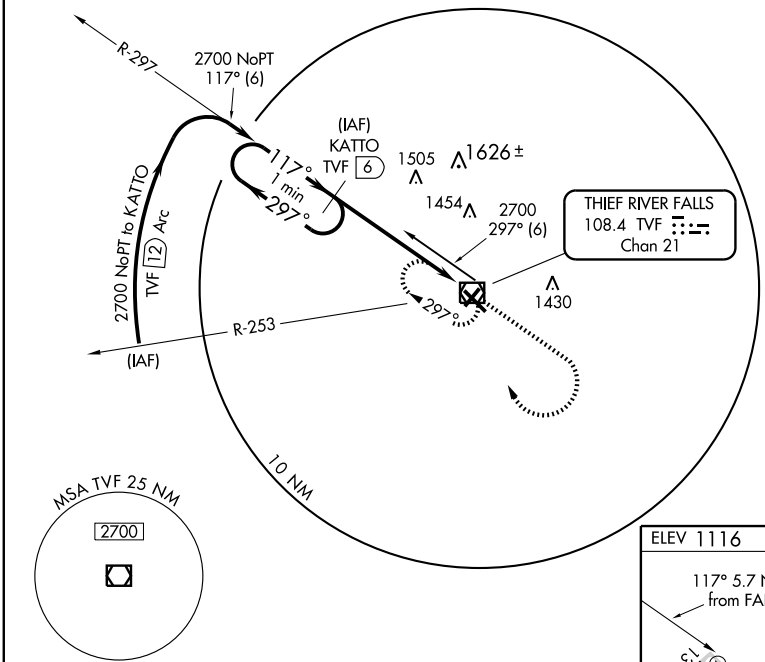
VOR/DME TVF 108.4 Chan 21	APP CRS 117°	Rwy Idg 6503 TDZE 1114 Apt Elev 1116

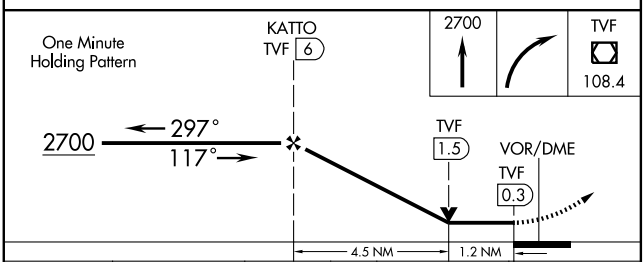
VOR/DME RWY 13
THIEF RIVER FALLS RGNL (TVF)

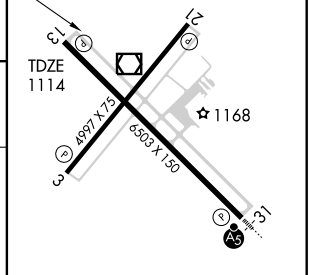
Circling to Rwy 3/21 NA.

MISSED APPROACH: Climb to 2700 then right turn direct TVF VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.4	132.15 269.6	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-13	1520-1 406 (500-1)		1520-1¼ 406 (500-1¼)	
CIRCLING	1540-1 424 (500-1)	1580-1 464 (500-1)	1580-1½ 464 (500-1½)	1680-2 564 (600-2)

HIRL Rwy 13-31 L
MIRL Rwy 3-21 L
REIL Rwys 3, 13 and 21 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME TVF	APP CRS	Rwy Idg	6503
108.4	312°	TDZE	1113
Chan 21		Apt Elev	1116

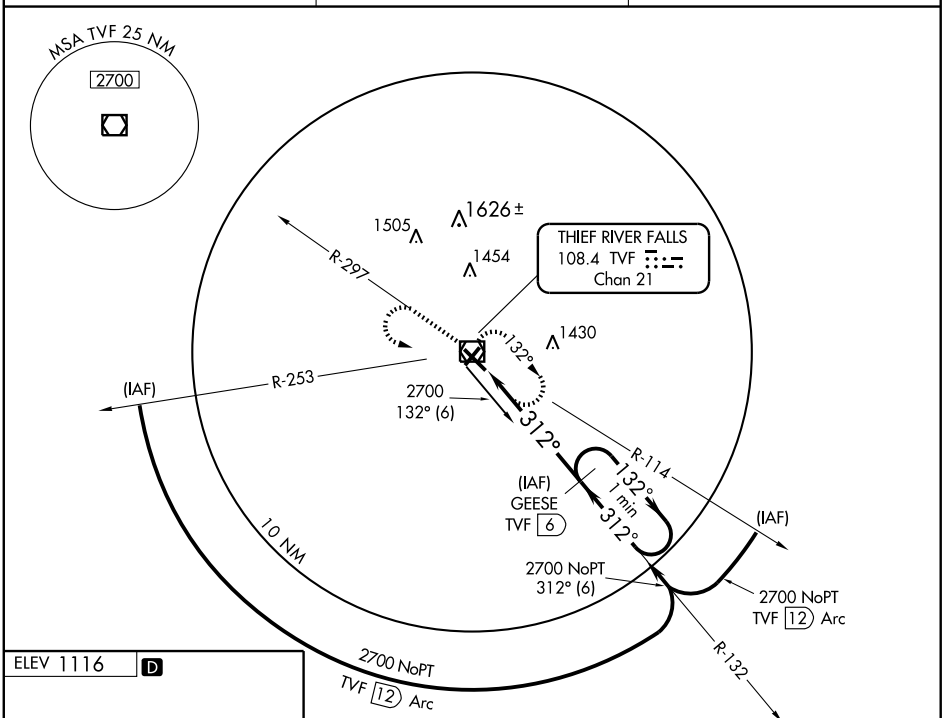
VOR/DME RWY 31
THIEF RIVER FALLS RGNL (TVF)

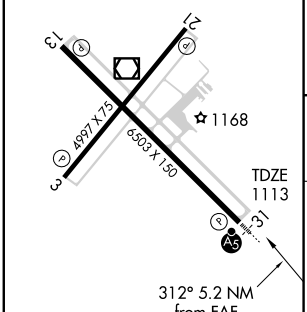
Increase S-31 Cat D visibility ¼ mile for inoperative MALSR. Circling to Rwy 3/21 NA.

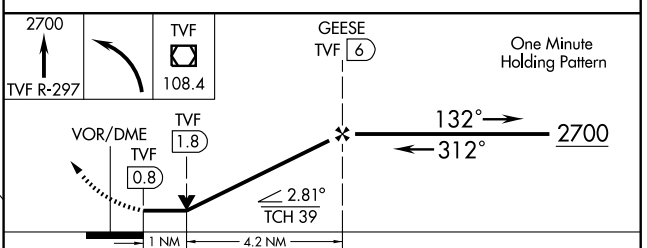
MALSR

MISSED APPROACH: Climb to 2700 via TVF R-297 then left turn direct TVF VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.4	132.15 269.6	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-31	1480-½ 367 (400-½)			1480-1 367 (400-1)
CIRCLING	1540-1 424 (500-1)	1580-1 464 (500-1)	1580-1½ 464 (500-1½)	1680-2 564 (600-2)

HIRL Rwy 13-31 L
MIRL Rwy 3-21 L
REIL Rwys 3, 13 and 21 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME TVF	APP CRS	Rwy Idg	6503
108.4	117°	TDZE	1115
Chan 21		Apt Elev	1119

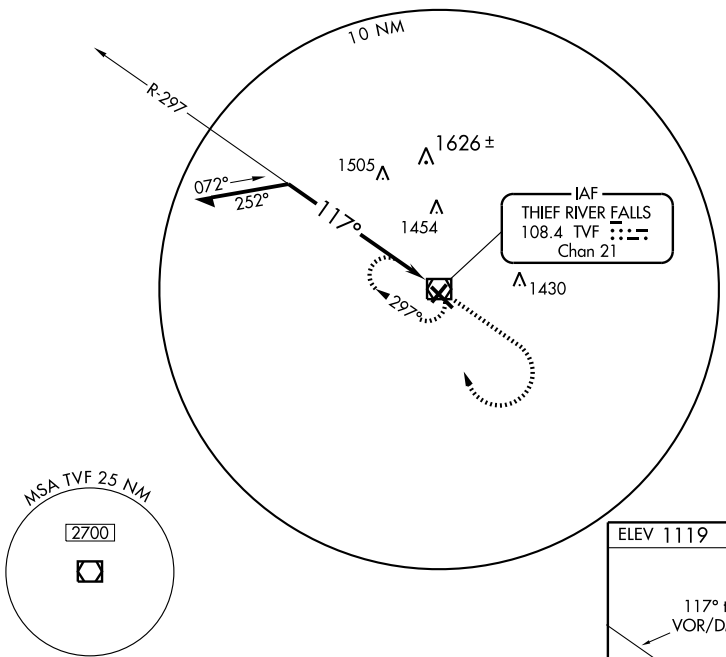
VOR RWY 13

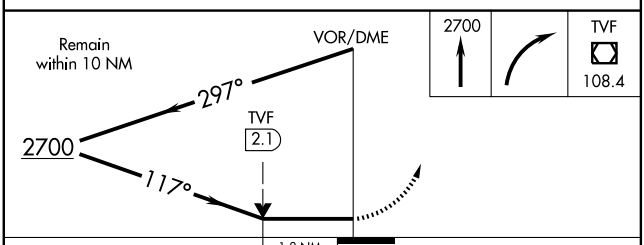
THIEF RIVER FALLS RGNL (TVF)

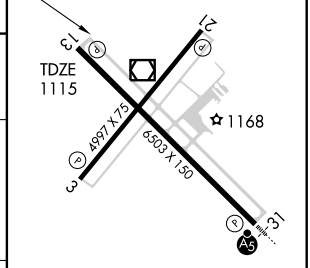
T Circling to Rwy 3/21 NA.
A VDP NA when using Crookston altimeter setting.
When local altimeter setting not received, use Crookston altimeter setting and increase all MDA 100 feet and increase Cat C and D visibilities ¼ mile.

MISSED APPROACH: Climb to 2700 then right turn direct TVF VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.4	132.15 269.6	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-13	1740-1 625 (700-1)		1740-1¾ 625 (700-1¾)	1740-2 625 (700-2)
CIRCLING	1740-1 621 (700-1)		1740-1¾ 621 (700-1¾)	1740-2 621 (700-2)

HIRL Rwy 13-31 L
MIRL Rwy 3-21 L
REIL Rwys 3, 13 and 21 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME TVF	APP CRS	Rwy Idg	6503
108.4	312°	TDZE	1113
Chan 21		Apt Elev	1116

VOR RWY 31

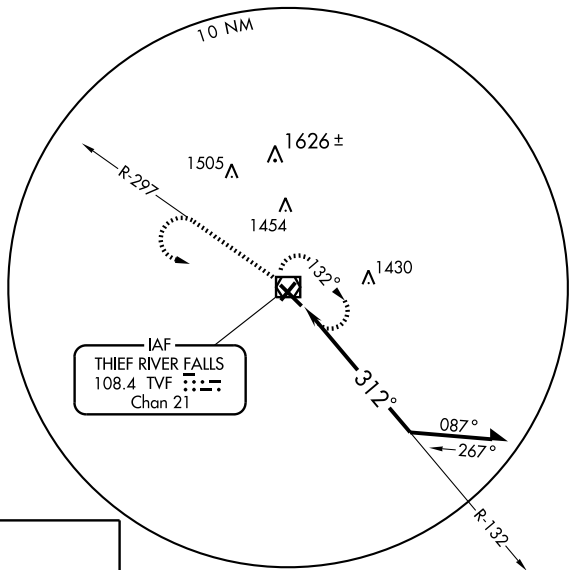
THIEF RIVER FALLS RGNL (TVF)

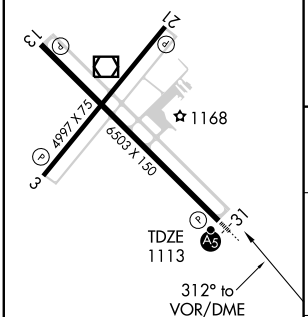
Circling to Rwy 3/21 NA.

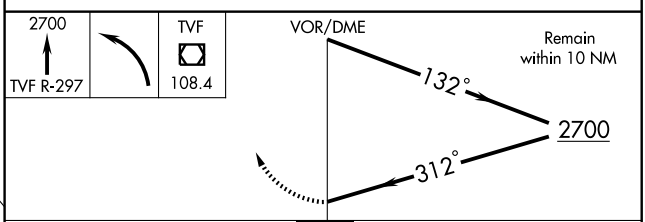
MALSR

MISSED APPROACH: Climb to 2700 via TVF R-297 then left turn direct TVF VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
108.4	132.15 269.6	122.8 (CTAF) L





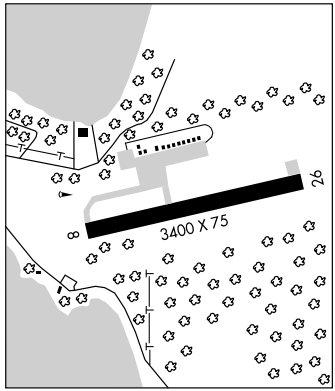


CATEGORY	A	B	C	D
S-31	1540-½ 427 (500-½)		1540-¾ 427 (500-¾)	1540-1 427 (500-1)
CIRCLING	1540-1 424 (500-1)	1580-1 464 (500-1)	1580-1½ 464 (500-1½)	1680-2 564 (600-2)

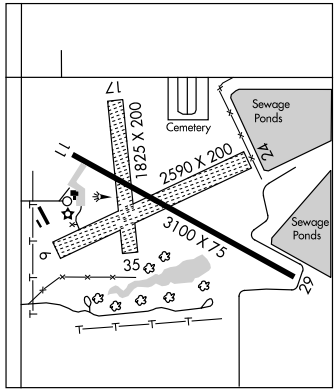
HIRL Rwy 13-31 L
MIRL Rwy 3-21 L
REIL Rwys 3, 13 and 21 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

TOWER MUNI (12D) 1 NW UTC−6(−5DT) N47°49.09′ W92°17.16′ GREEN BAY L–14I IAP
1369 **FUEL** 100LL NOTAM FILE PNM
RWY 08–26: H3400X75 (ASPH) MIRL
RWY 08: Road. **RWY 26:** Trees. Rgt tfc.
AIRPORT REMARKS: Unattended. Self service fuel avbl 24 hrs with credit card. Ultralight tfc on and invof arpt. MIRL Rwy 08–26 preset medium ints, to increase ints and ACTIVATE—CTAF.
COMMUNICATIONS: CTAF 122.9
Ⓡ **MINNEAPOLIS CENTER APP CON** 127.0
MINNEAPOLIS CENTER DEP CON 127.0
RADIO AIDS TO NAVIGATION: NOTAM FILE ELO.
ELY (L) VOR/DME 109.6 ELO Chan 33 N47°49.31′ W91°49.81′ 270° 18.7 NM to fld. 1489/0E.
• • • • • • • • • • • • • • • • • •
WATERWAY 14–32: 5000X200 (WATER)



TRACY MUNI (TKC) 1 NE UTC−6(−5DT) N44°14.95′ W95°36.44′ OMAHA L–12I IAP
1340 B **FUEL** 100LL NOTAM FILE TKC
RWY 11–29: H3100X75 (ASPH) MIRL
RWY 11: Road.
RWY 06–24: 2590X200 (TURF)
RWY 06: Road. **RWY 24:** Fence.
RWY 17–35: 1825X200 (TURF)
RWY 17: Road. **RWY 35:** Trees.
AIRPORT REMARKS: Unattended. For service call arpt manager: 507–629–3833/829–9310. Rwy 06–24 and Rwy 17–35 not plowed winter months. Rwy 06–24 and Rwy 17–35 marked with A–frames painted red and white. ACTIVATE MIRL Rwy 11–29—CTAF.
WEATHER DATA SOURCES: AWOS–3 120.0 (507) 629–9006.
COMMUNICATIONS: CTAF 122.9
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.1
RADIO AIDS TO NAVIGATION: NOTAM FILE RWF.
REDWOOD FALLS (H) VORW/DME 113.3 RWF Chan 80 N44°28.04′ W95°07.69′ 231° 24.4 NM to fld. 1061/7E. **HIWAS.**



TWO HARBORS N47°03.12′ W91°44.68′ NOTAM FILE TWM. GREEN BAY L–14I
NDB (MHW) 243 TWM at Richard B. Helgeson.

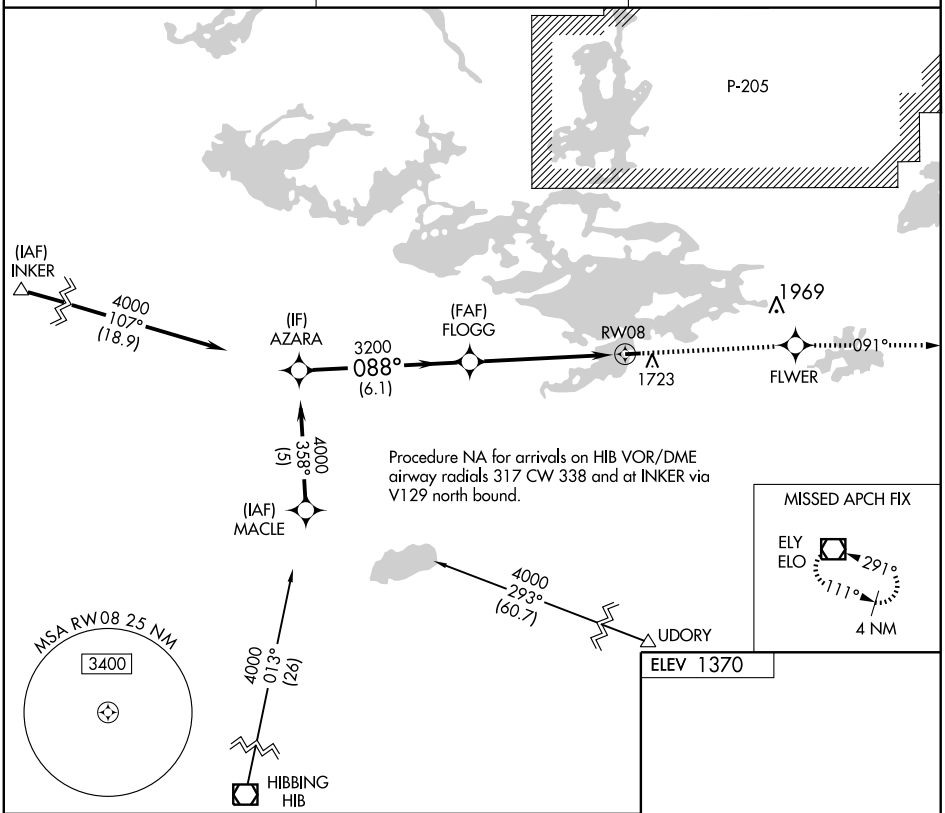
APP CRS	Rwy Idg	3400
088°	TDZE	1369
	Apt Elev	1370

RNAV (GPS) RWY 8
TOWER MUNI (12D)

DME/DME RNP- 0.3 NA. Procedure NA at night.
Use Cook altimeter setting, when not received, use Ely altimeter setting and increase all MDA 20 feet and increase LNAV Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 4000 direct FLWER and via 091° track to ELO VOR/DME and hold.

COOK AWOS-3	MINNEAPOLIS CENTER	CTAF
118.175	127.9 281.45	122.9 L



CATEGORY	A	B	C	D
LNAV MDA	1960-1 591 (600-1)		1960-1½ 591 (600-1½)	NA
CIRCLING	2120-1 750 (800-1)	2120-1¼ 750 (800-1¼)	2120-2¼ 750 (800-2¼)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 26

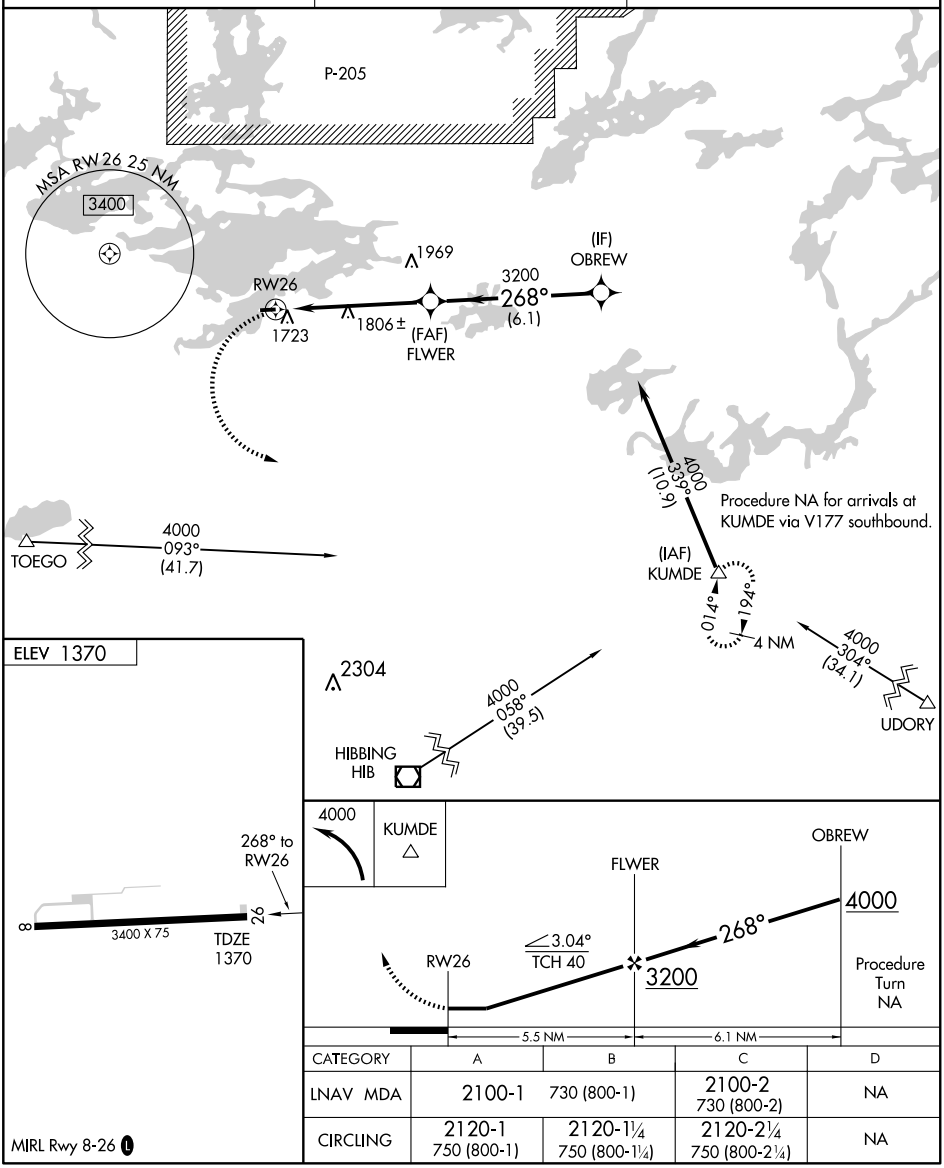
TOWER MUNI (12D)

APP CRS	Rwy Idg	3400
268°	TDZE	1370
	Apt Elev	1370

DME/DME RNP- 0.3 NA. Procedure NA at night.
NA Visibility reduction by helicopters NA.
Use Cook altimeter setting, when not received, use Ely altimeter setting and increase all MDA 20 feet and increase Cat B and C visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 4000 direct KUMDE and hold.

COOK AWOS-3	MINNEAPOLIS CENTER	CTAF
118.175	127.9 281.45	122.9 L

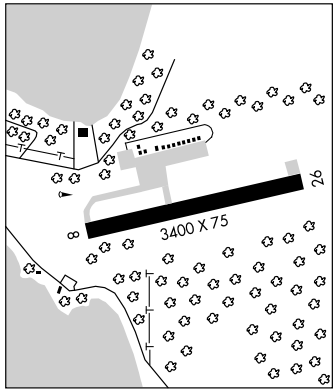


CATEGORY	A	B	C	D
LNAV MDA	2100-1	730 (800-1)	2100-2 730 (800-2)	NA
CIRCLING	2120-1 750 (800-1)	2120-1¼ 750 (800-1¼)	2120-2¼ 750 (800-2¼)	NA

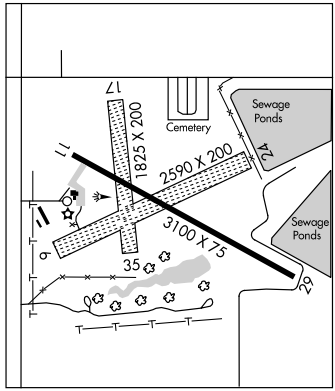
MIRL Rwy 8-26 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

TOWER MUNI (12D) 1 NW UTC−6(−5DT) N47°49.09′ W92°17.16′ GREEN BAY L–14I IAP
1369 **FUEL** 100LL NOTAM FILE PNM
RWY 08–26: H3400X75 (ASPH) MIRL
RWY 08: Road. **RWY 26:** Trees. Rgt tfc.
AIRPORT REMARKS: Unattended. Self service fuel avbl 24 hrs with credit card. Ultralight tfc on and invof arpt. MIRL Rwy 08–26 preset medium ints, to increase ints and ACTIVATE—CTAF.
COMMUNICATIONS: CTAF 122.9
Ⓡ **MINNEAPOLIS CENTER APP CON** 127.0
MINNEAPOLIS CENTER DEP CON 127.0
RADIO AIDS TO NAVIGATION: NOTAM FILE ELO.
ELY (L) VOR/DME 109.6 ELO Chan 33 N47°49.31′ W91°49.81′ 270° 18.7 NM to fld. 1489/0E.
• • • • • • • • • • • • • • • • • •
WATERWAY 14–32: 5000X200 (WATER)



TRACY MUNI (TKC) 1 NE UTC−6(−5DT) N44°14.95′ W95°36.44′ OMAHA L–12I IAP
1340 B **FUEL** 100LL NOTAM FILE TKC
RWY 11–29: H3100X75 (ASPH) MIRL
RWY 11: Road.
RWY 06–24: 2590X200 (TURF)
RWY 06: Road. **RWY 24:** Fence.
RWY 17–35: 1825X200 (TURF)
RWY 17: Road. **RWY 35:** Trees.
AIRPORT REMARKS: Unattended. For service call arpt manager: 507–629–3833/829–9310. Rwy 06–24 and Rwy 17–35 not plowed winter months. Rwy 06–24 and Rwy 17–35 marked with A–frames painted red and white. ACTIVATE MIRL Rwy 11–29—CTAF.
WEATHER DATA SOURCES: AWOS–3 120.0 (507) 629–9006.
COMMUNICATIONS: CTAF 122.9
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.1
RADIO AIDS TO NAVIGATION: NOTAM FILE RWF.
REDWOOD FALLS (H) VORW/DME 113.3 RWF Chan 80 N44°28.04′ W95°07.69′ 231° 24.4 NM to fld. 1061/7E. **HIWAS.**



TWO HARBORS N47°03.12′ W91°44.68′ NOTAM FILE TWM. GREEN BAY L–14I
NDB (MHW) 243 TWM at Richard B. Helgeson.

RNAV (GPS) RWY 11

TRACY MUNI (TKC)

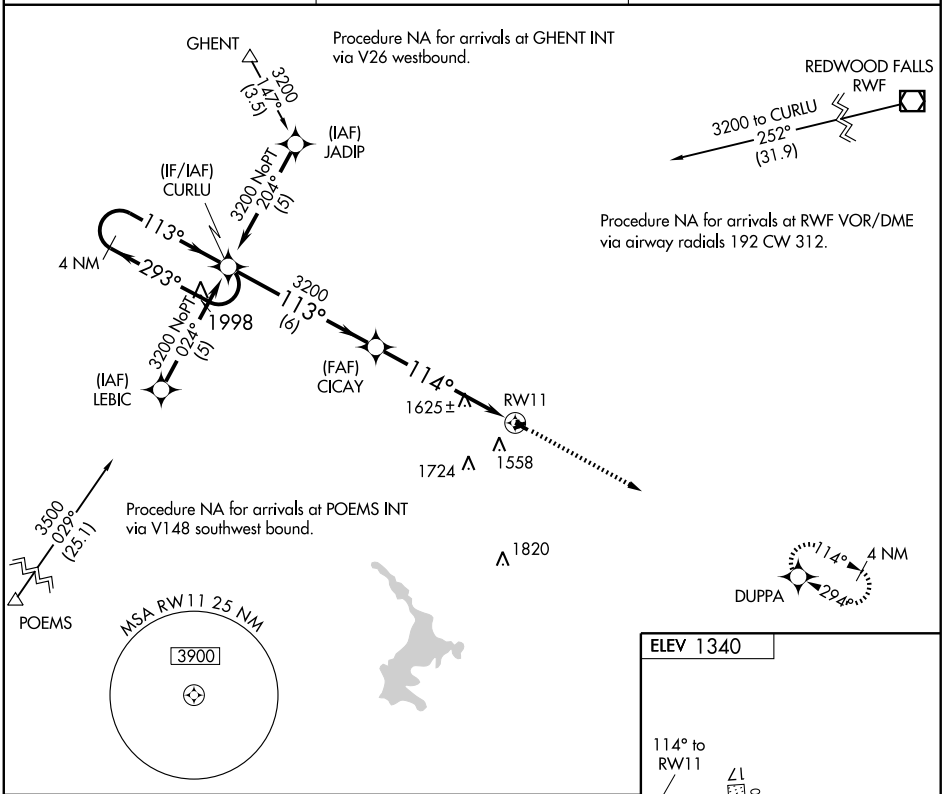
APP CRS		
114°	Rwy Idg	3100
	TDZE	1336
	Apt Elev	1340

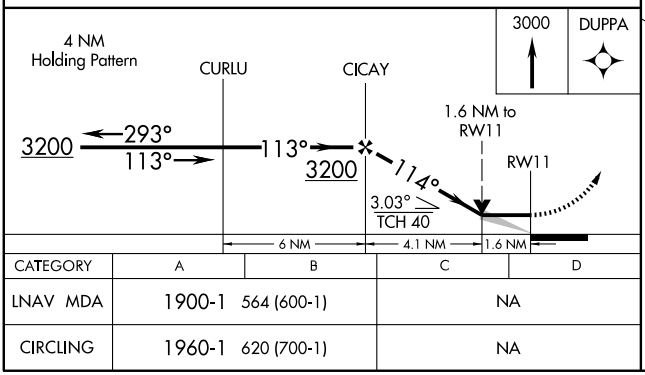
NA

DME/DME RNP- 0.3 NA.
If local altimeter setting not received, use Marshall/Ryan altimeter setting and increase all MDAs 60 feet.
Procedure NA at night.

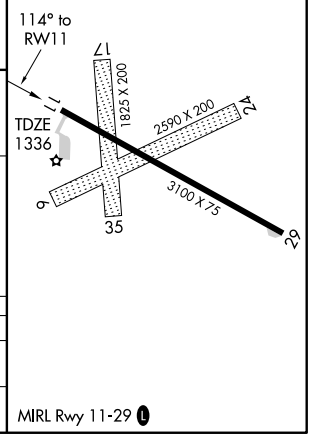
MISSED APPROACH: Climb to 3000 direct DUPPA and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
120.0	127.1 290.2	122.9 L





CATEGORY	A	B	C	D
LNAV MDA	1900-1 564 (600-1)		NA	
CIRCLING	1960-1 620 (700-1)		NA	



NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 29

TRACY MUNI (TKC)

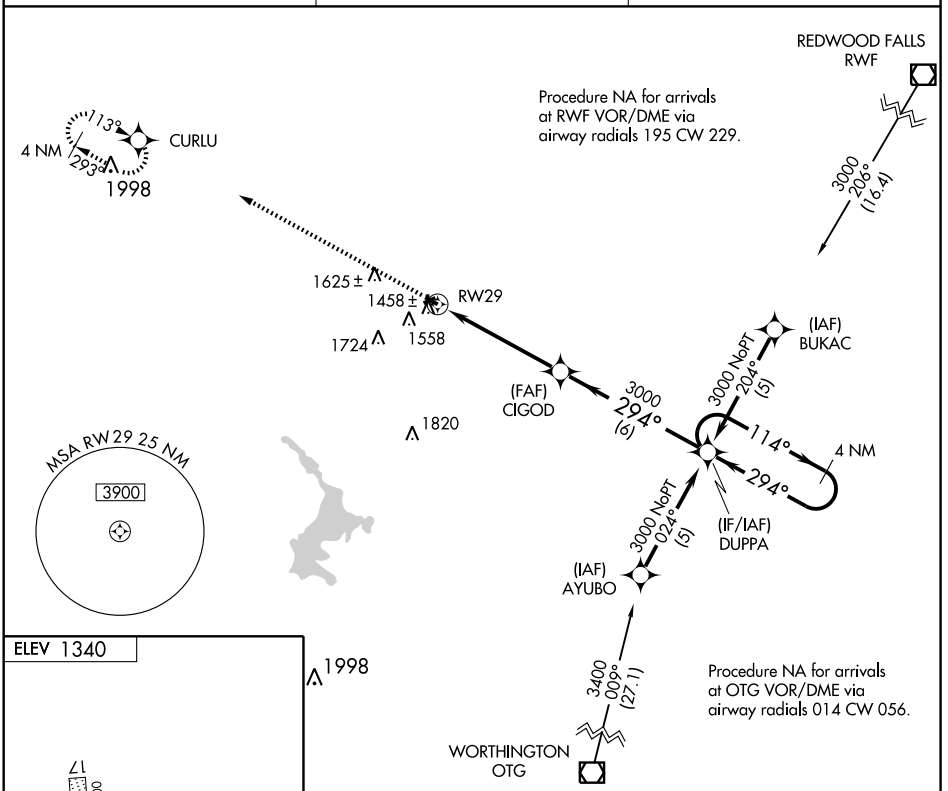
APP CRS	Rwy Idg	3100
294°	TDZE	1336
	Apt Elev	1340

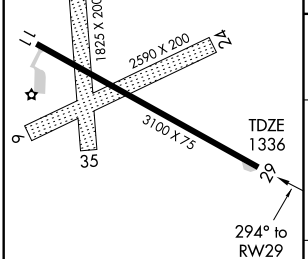
NA

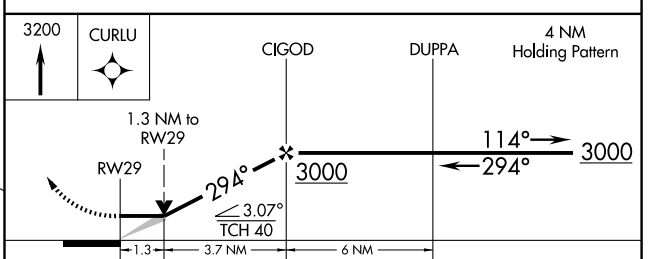
DME/DME RNP- 0.3 NA.
If local altimeter setting not received, use Marshall/Ryan altimeter setting and increase all MDAs 60 feet.
Procedure NA at night.

MISSED APPROACH: Climb to 3200 direct CURLU and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
120.0	127.1 290.2	122.9 L







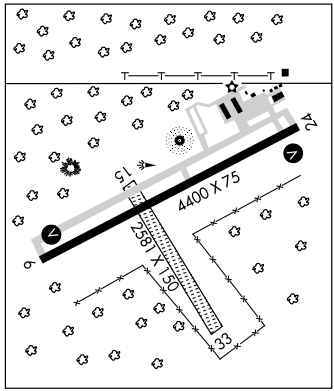
CATEGORY	A	B	C	D
LNAV MDA	1780-1 444 (500-1)		NA	
CIRCLING	1920-1 580 (600-1)		NA	

MIRL Rwy 11-29 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

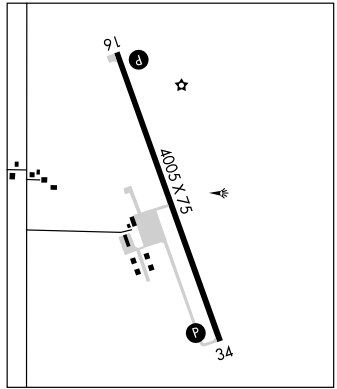
TWO HARBORS

RICHARD B HELGESON (TWM) 4 NW UTC−6(−5DT) N47°02.95′ W91°44.71′ **GREEN BAY**
1073 B **FUEL** 100LL, MOGAS, JET A TPA—1873(800) NOTAM FILE TWM **L–14I**
RWY 06–24: H4400X75 (ASPH) MIRL **IAP**
RWY 06: REIL. VASI(V2L)—GA 3.0° TCH 20′.
RWY 24: REIL. VASI(V2L)—GA 3.0° TCH 23′.
RWY 15–33: 2581X150 (TURF) 1.4% up NW
AIRPORT REMARKS: Attended dalgt hrs. For svc after hrs call 218–834–2969/3475′. Fuel 100LL and MOGAS avbl 24hrs with credit card. Rwy 15–33 CLOSED winter months except ski equipped acft. Rwy 15–33 marked with yellow cones. ACTIVATE MIRL Rwy 06–24, VASI and REIL Rwy 06 and Rwy 24—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.325 (218) 834–6591.
COMMUNICATIONS: CTAF 122.9
Ⓡ **DULUTH APP/DEP CON** 125.45 (1200–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.9 (0500–1200Z‡)
GCO 121.725 (1200–0500Z‡) (DULUTH CLNC and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE DLH.
DULUTH (H) VORTACW 112.6 DLH Chan 73 N46°48.13′ W92°12.17′ 047° 24.0 NM to fld. 1428/5E.
TWO HARBORS NDB (MHW) 243 TWM N47°03.12′ W91°44.68′ at fld. NOTAM FILE TWM.



TYLER MUNI (63Y) 1 NW UTC−6(−5DT) N44°17.50′ W96°09.02′ **OMAHA**
1742 B NOTAM FILE PNM
RWY 14–32: 2600X160 (TURF) LIRL
RWY 32: Road.
AIRPORT REMARKS: Unattended. Confirm snow removal and winter conditions with Arpt Manager from 1400–2300Z‡ call 504–247–5556. Rwy 14–32 marked with yellow cones.
COMMUNICATIONS: CTAF 122.9

WADENA MUNI (ADC) 3 W UTC−6(−5DT) N46°27.02′ W95°12.66′ **TWIN CITIES**
1369 B S4 **FUEL** 100LL, MOGAS NOTAM FILE ADC **L–14H**
RWY 16–34: H4005X75 (ASPH) MIRL 0.3% up NW **IAP**
RWY 16: REIL. PAPI(P4L)—GA 3.0° TCH 42′.
RWY 34: REIL. PAPI(P4L)—GA 3.0° TCH 42′.
AIRPORT REMARKS: Mon–Fri 1400–2300Z‡. Fuel avbl 24 hrs with credit card only. Ultralight activity on and invof arpt. ACTIVATE MIRL Rwy 16–34 PAPI and REIL Rwy 16 and Rwy 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 128.325 (218) 631–7774.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 126.1
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE AXN
ALEXANDRIA (L) VORW/DME 112.8 AXN Chan 75 N45°57.50′ W95°13.96′ 355° 29.5 NM to fld. 1367/7E **HIWAS.**



APP CRS	Rwy Idg	4400
241°	TDZE	1073
	Apt Elev	1080

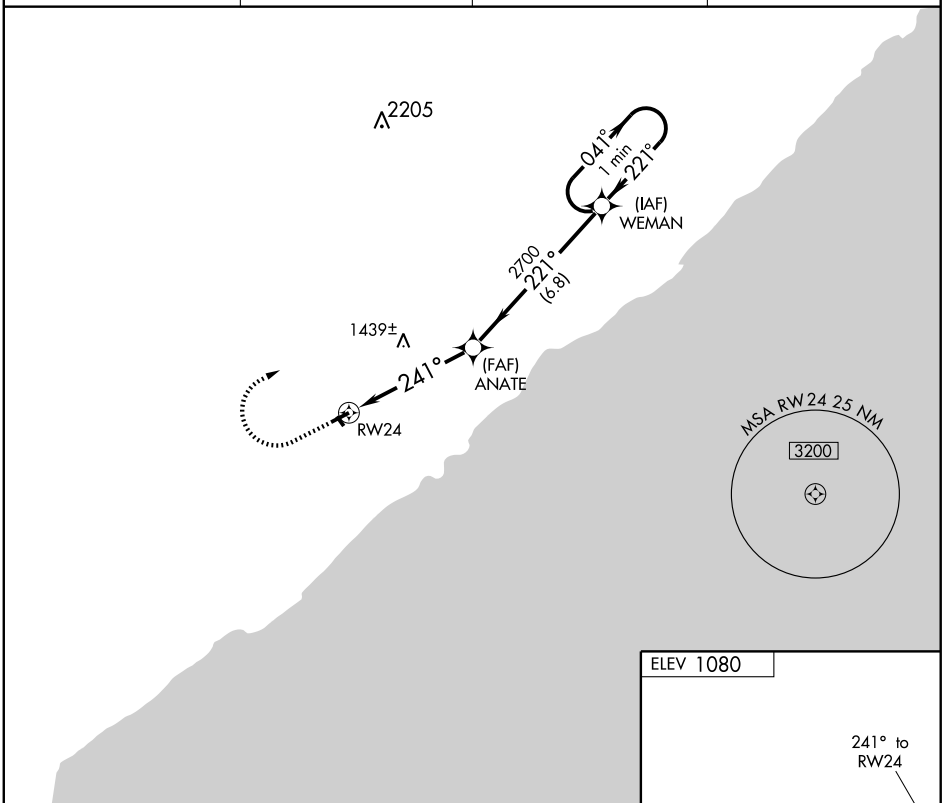
GPS RWY 24

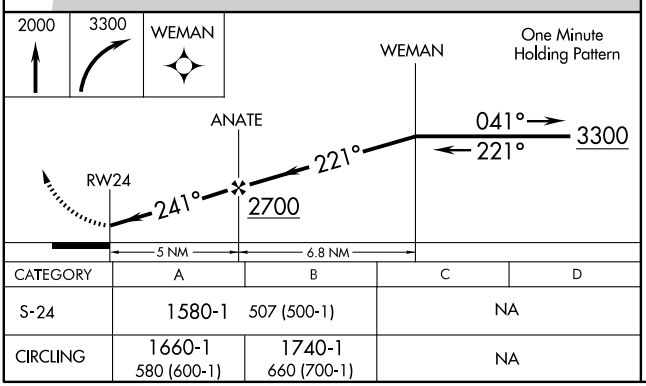
TWO HARBORS/ RICHARD B HELGESON (TWM)

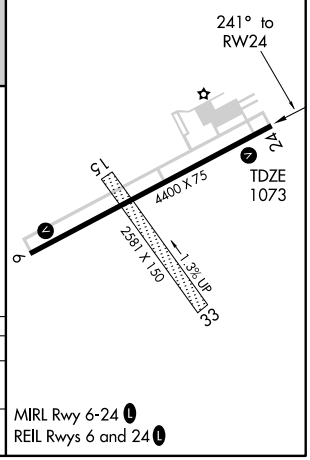
NA

MISSED APPROACH: Climb to 2000 then climbing right turn to 3300 direct WEMAN WP and hold.

AWOS-3	DULUTH APP CON★	GCO	CTAF
119.325	125.45 255.9	121.725	122.9 L







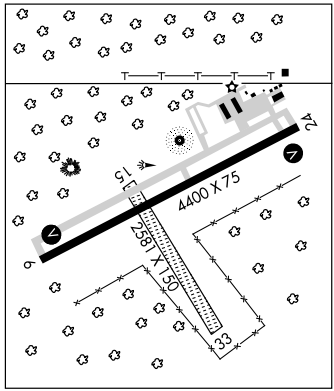
CATEGORY	A	B	C	D
S-24	1580-1	507 (500-1)	NA	
CIRCLING	1660-1 580 (600-1)	1740-1 660 (700-1)	NA	

MIRL Rwy 6-24 L
REIL Rwys 6 and 24 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

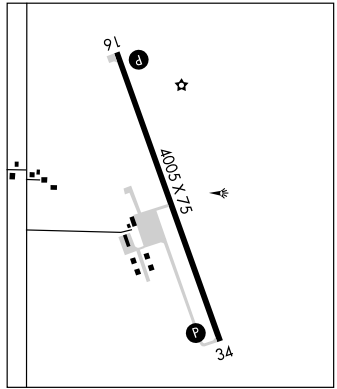
TWO HARBORS

RICHARD B HELGESON (TWM) 4 NW UTC−6(−5DT) N47°02.95′ W91°44.71′ **GREEN BAY**
1073 B **FUEL** 100LL, MOGAS, JET A TPA—1873(800) NOTAM FILE TWM **L–14I**
RWY 06–24: H4400X75 (ASPH) MIRL **IAP**
RWY 06: REIL. VASI(V2L)—GA 3.0° TCH 20′.
RWY 24: REIL. VASI(V2L)—GA 3.0° TCH 23′.
RWY 15–33: 2581X150 (TURF) 1.4% up NW
AIRPORT REMARKS: Attended dalgt hrs. For svc after hrs call 218–834–2969/3475′. Fuel 100LL and MOGAS avbl 24hrs with credit card. Rwy 15–33 CLOSED winter months except ski equipped acft. Rwy 15–33 marked with yellow cones. ACTIVATE MIRL Rwy 06–24, VASI and REIL Rwy 06 and Rwy 24—CTAF.
WEATHER DATA SOURCES: AWOS–3 119.325 (218) 834–6591.
COMMUNICATIONS: CTAF 122.9
Ⓡ **DULUTH APP/DEP CON** 125.45 (1200–0500Z‡)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.9 (0500–1200Z‡)
GCO 121.725 (1200–0500Z‡) (DULUTH CLNC and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE DLH.
DULUTH (H) VORTACW 112.6 DLH Chan 73 N46°48.13′ W92°12.17′ 047° 24.0 NM to fld. 1428/5E.
TWO HARBORS NDB (MHW) 243 TWM N47°03.12′ W91°44.68′ at fld. NOTAM FILE TWM.



TYLER MUNI (63Y) 1 NW UTC−6(−5DT) N44°17.50′ W96°09.02′ **OMAHA**
1742 B NOTAM FILE PNM
RWY 14–32: 2600X160 (TURF) LIRL
RWY 32: Road.
AIRPORT REMARKS: Unattended. Confirm snow removal and winter conditions with Arpt Manager from 1400–2300Z‡ call 504–247–5556. Rwy 14–32 marked with yellow cones.
COMMUNICATIONS: CTAF 122.9

WADENA MUNI (ADC) 3 W UTC−6(−5DT) N46°27.02′ W95°12.66′ **TWIN CITIES**
1369 B S4 **FUEL** 100LL, MOGAS NOTAM FILE ADC **L–14H**
RWY 16–34: H4005X75 (ASPH) MIRL 0.3% up NW **IAP**
RWY 16: REIL. PAPI(P4L)—GA 3.0° TCH 42′.
RWY 34: REIL. PAPI(P4L)—GA 3.0° TCH 42′.
AIRPORT REMARKS: Mon–Fri 1400–2300Z‡. Fuel avbl 24 hrs with credit card only. Ultralight activity on and invof arpt. ACTIVATE MIRL Rwy 16–34 PAPI and REIL Rwy 16 and Rwy 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 128.325 (218) 631–7774.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 126.1
GCO 121.725 (MINNEAPOLIS CENTER and FLIGHT SERVICES)
RADIO AIDS TO NAVIGATION: NOTAM FILE AXN
ALEXANDRIA (L) VORW/DME 112.8 AXN Chan 75 N45°57.50′ W95°13.96′ 355° 29.5 NM to fld. 1367/7E **HIWAS.**



AL-9365 (FAA)

RNAV (GPS) RWY 34

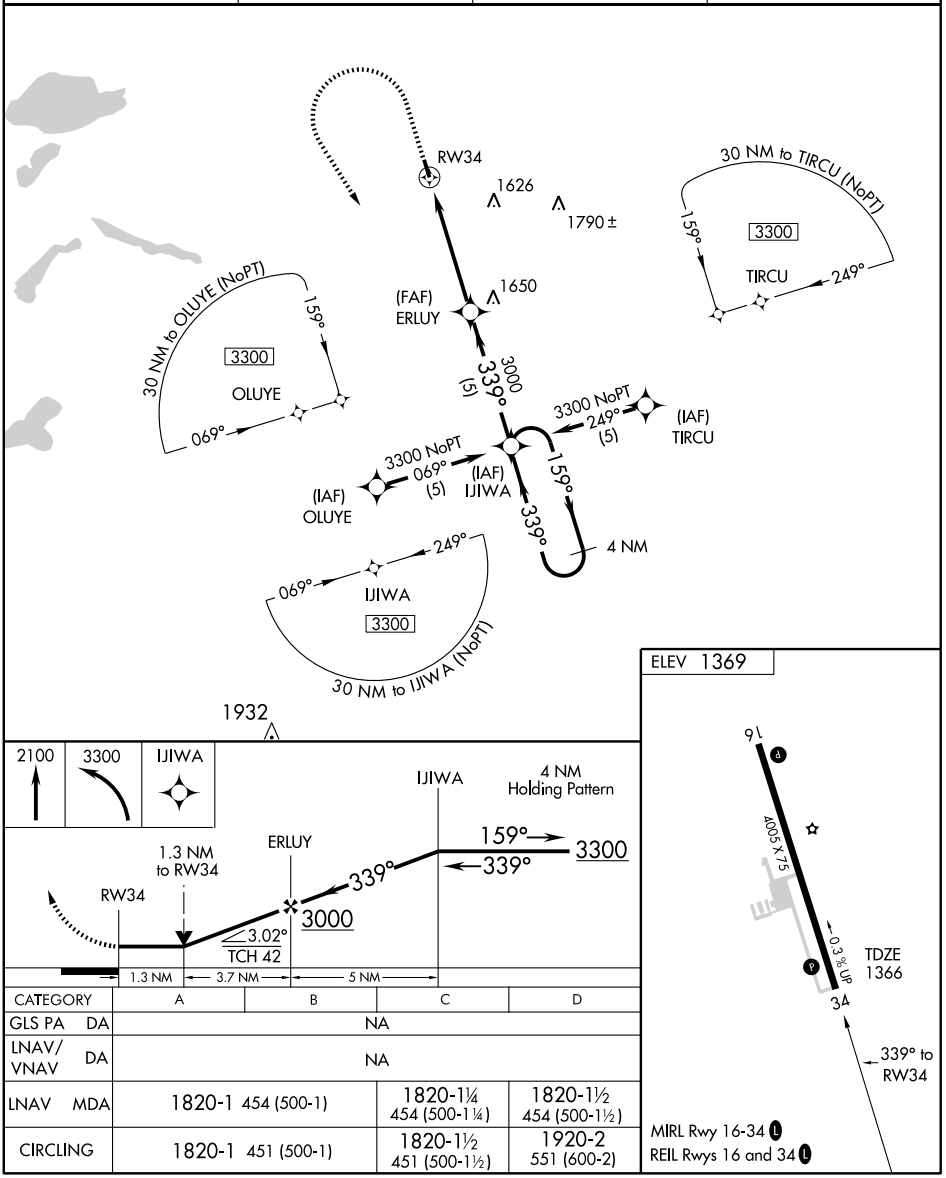
WADENA MUNI (ADC)

APP CRS	Rwy ldg	4005
339°	TDZE	1366
	Apt Elev	1369

NA
GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 2100 then climbing left turn to 3300 direct IJIWA WP and hold.

AWOS-3	MINNEAPOLIS CENTER	GCO	UNICOM
128.325	126.1 269.2	121.725	122.8 (CTAF) L



CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	NA			
LNAV MDA	1820-1 454 (500-1)		1820-1¼ 454 (500-1¼)	1820-1½ 454 (500-1½)
CIRCLING	1820-1 451 (500-1)		1820-1½ 451 (500-1½)	1920-2 551 (600-2)

46° 27′ N - 95° 13′ W

WADENA MUNI (ADC)
RNAV (GPS) RWY 34

NC-1, 21 OCT 2010 to 18 NOV 2010

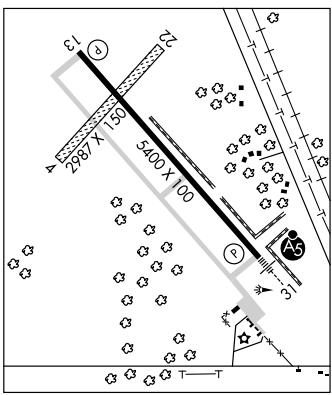
NC-1, 21 OCT 2010 to 18 NOV 2010

WALKER MUNI (Y49) 4 NW UTC−6(−5DT) N47°09.57′ W94°38.73′ — TWIN CITIES L–14H
1364 B **FUEL** 100LL NOTAM FILE PNM
RWY 15–33: H3210X75 (ASPH) MIRL
RWY 15: REIL. PAPI(P4L)—GA 3.0° TCH 26′. Trees. **RWY 33:** REIL. PAPI(P4L)—GA 3.0° TCH 24′. Trees.
AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs by credit card. ACTIVATE MIRL Rwy 15–33, and PAPI Rwy 15 and Rwy 33, and REIL Rwy 15 and Rwy 33—CTAF.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE PKD
PARK RAPIDS (L) VOR/DME 110.6 PKD Chan 43 N46°53.89′ W95°04.25′ 044° 23.5 NM to fld. 1441/4E.

WARREN MUNI (D37) 2 E UTC−6(−5DT) N48°11.47′ W96°42.67′ — TWIN CITIES L–14G, IAP
886 B **FUEL** 100LL NOTAM FILE PNM
RWY 12–30: H3205X75 (ASPH) S–26 MIRL (NSTD)
RWY 12: Road. **RWY 30:** Trees.
RWY 04–22: 2606X200 (TURF)
RWY 04: Trees. **RWY 22:** Road.
AIRPORT REMARKS: Unattended. For arpt svcs call 218–745–5323 or 218–201–0033. Rwy 04–22 CLOSED winter months. Ultralight activity on and invof arpt. Deer on and invof arpt. Rwy 04–22 marked with yellow cones. Rwy 12–30 NSTD MIRL. Rwy end lgts positioned at pavement edge. Rwy lgts not frangible. Rwy 30, visual lighting on instrument rwy.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **GRAND FORKS APP/DEP CON** 118.1
RADIO AIDS TO NAVIGATION: NOTAM FILE TVF.
THIEF RIVER FALLS (L) VOR/DME 108.4 TVF Chan 21 N48°04.16′ W96°11.19′ 281° 22.3 NM to fld. 1039/8E.

WARROAD N48°55.88′ W95°20.42′ — TWIN CITIES H–2J, L–14H
RCO 122.55 (PRINCETON RADIO)

WARROAD INTL MEM (RRT) 2 NW UTC−6(−5DT) — TWIN CITIES H–2J, L–14H, IAP
N48°56.49′ W95°20.91′
1076 B **FUEL** 100LL, JET A TPA—1876(800) LRA NOTAM FILE RRT
RWY 13–31: H5400X100 (ASPH) S–30, D–40 HIRL
RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 29′.
RWY 31: MALSR. PAPI(P4L)—GA 3.0° TCH 29′.
RWY 04–22: 2987X150 (TURF)
AIRPORT REMARKS: Attended continuously. For svc nights and weekends call 218–242–1087. Customs avbl: 218–386–1676, cell: 218–689–3880. Birds on and invof arpt. Rwy 04–22 clsd winter months. Rwy 04–22 marked with yellow cones. HIRL Rwy 13–31 preset to med ints, increase ints and ACTIVATE MALSR Rwy 31 and REIL Rwy 13—CTAF. PAPI Rwy 13 and Rwy 31 opr continuously.
WEATHER DATA SOURCES: AWOS–3 119.925 (218) 386–1813.
COMMUNICATIONS: CTAF/UNICOM 123.05
RCO 122.55 (PRINCETON RADIO)
MINNEAPOLIS CENTER APP/DEP CON 134.75
RADIO AIDS TO NAVIGATION: NOTAM FILE ROX.
ROSEAU (L) VORW/DME 108.8 ROX Chan 25 N48°51.28′ W95°41.70′ 064° 14.7 NM to fld. 1059/5E.
ROADD NDB (LOM) 360 SW N48°51.77′ W95°14.51′ 315° 6.3 NM to fld.
ILS/DME 110.1 I–SWE Chan 38 Rwy 31. LOM ROADD NDB.



RNAV (GPS) RWY 30

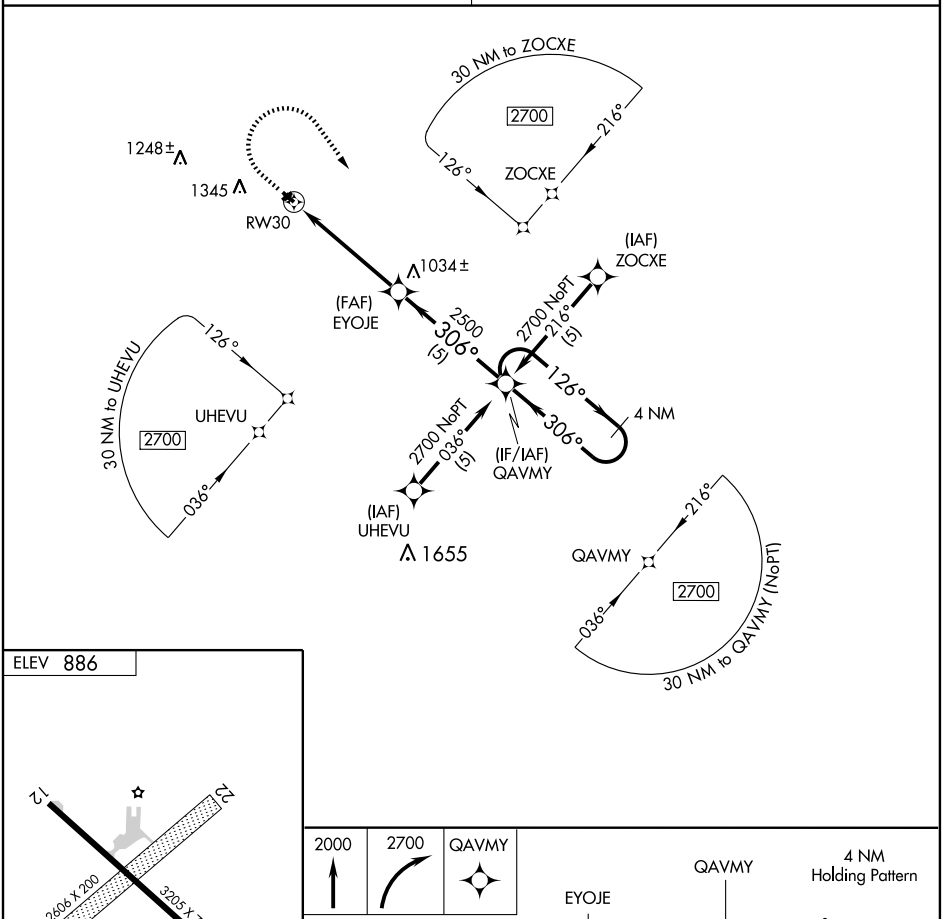
WARREN MUNI (D37)

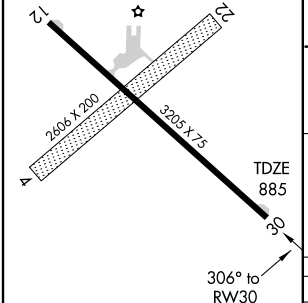
APP CRS	Rwy Idg	3205
306°	TDZE	885
	Apt Elev	886

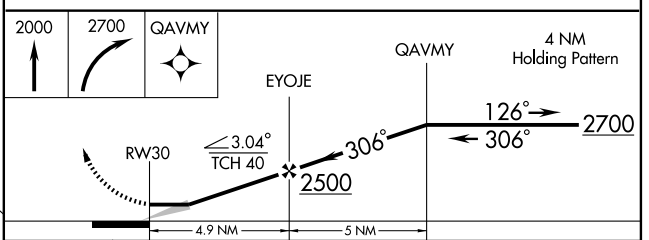
T NA — Use Crookston Muni-Kirkwood Field altimeter setting. GPS or RNP -0.3 required. DME/DME RNP- 0.3 NA.

MISSED APPROACH: Climb to 2000, then climbing right turn to 2700 direct QAVMY WP and hold.

GRAND FORKS APP CON	UNICOM
118.1 318.1	**122.8** (CTAF)







CATEGORY	A	B	C	D
LNAV MDA	1480-1 595 (600-1)		NA	
CIRCLING	1480-1 594 (600-1)		NA	

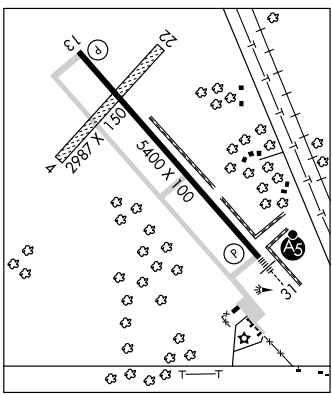
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WALKER MUNI (Y49) 4 NW UTC−6(−5DT) N47°09.57′ W94°38.73′ — TWIN CITIES L–14H
1364 B **FUEL** 100LL NOTAM FILE PNM
RWY 15–33: H3210X75 (ASPH) MIRL
RWY 15: REIL. PAPI(P4L)—GA 3.0° TCH 26′. Trees. **RWY 33:** REIL. PAPI(P4L)—GA 3.0° TCH 24′. Trees.
AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs by credit card. ACTIVATE MIRL Rwy 15–33, and PAPI Rwy 15 and Rwy 33, and REIL Rwy 15 and Rwy 33—CTAF.
COMMUNICATIONS: CTAF 122.9
RADIO AIDS TO NAVIGATION: NOTAM FILE PKD
PARK RAPIDS (L) VOR/DME 110.6 PKD Chan 43 N46°53.89′ W95°04.25′ 044° 23.5 NM to fld. 1441/4E.

WARREN MUNI (D37) 2 E UTC−6(−5DT) N48°11.47′ W96°42.67′ — TWIN CITIES L–14G, IAP
886 B **FUEL** 100LL NOTAM FILE PNM
RWY 12–30: H3205X75 (ASPH) S–26 MIRL (NSTD)
RWY 12: Road. **RWY 30:** Trees.
RWY 04–22: 2606X200 (TURF)
RWY 04: Trees. **RWY 22:** Road.
AIRPORT REMARKS: Unattended. For arpt svcs call 218–745–5323 or 218–201–0033. Rwy 04–22 CLOSED winter months. Ultralight activity on and invof arpt. Deer on and invof arpt. Rwy 04–22 marked with yellow cones. Rwy 12–30 NSTD MIRL. Rwy end lgts positioned at pavement edge. Rwy lgts not frangible. Rwy 30, visual lighting on instrument rwy.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **GRAND FORKS APP/DEP CON** 118.1
RADIO AIDS TO NAVIGATION: NOTAM FILE TVF.
THIEF RIVER FALLS (L) VOR/DME 108.4 TVF Chan 21 N48°04.16′ W96°11.19′ 281° 22.3 NM to fld. 1039/8E.

WARROAD N48°55.88′ W95°20.42′ — TWIN CITIES H–2J, L–14H
RCO 122.55 (PRINCETON RADIO)

WARROAD INTL MEM (RRT) 2 NW UTC−6(−5DT) — TWIN CITIES H–2J, L–14H, IAP
N48°56.49′ W95°20.91′
1076 B **FUEL** 100LL, JET A TPA—1876(800) LRA NOTAM FILE RRT
RWY 13–31: H5400X100 (ASPH) S–30, D–40 HIRL
RWY 13: REIL. PAPI(P4L)—GA 3.0° TCH 29′.
RWY 31: MALSR. PAPI(P4L)—GA 3.0° TCH 29′.
RWY 04–22: 2987X150 (TURF)
AIRPORT REMARKS: Attended continuously. For svc nights and weekends call 218–242–1087. Customs avbl: 218–386–1676, cell: 218–689–3880. Birds on and invof arpt. Rwy 04–22 clsd winter months. Rwy 04–22 marked with yellow cones. HIRL Rwy 13–31 preset to med ints, increase ints and ACTIVATE MALSR Rwy 31 and REIL Rwy 13—CTAF. PAPI Rwy 13 and Rwy 31 opr continuously.
WEATHER DATA SOURCES: AWOS–3 119.925 (218) 386–1813.
COMMUNICATIONS: CTAF/UNICOM 123.05
RCO 122.55 (PRINCETON RADIO)
MINNEAPOLIS CENTER APP/DEP CON 134.75
RADIO AIDS TO NAVIGATION: NOTAM FILE ROX.
ROSEAU (L) VORW/DME 108.8 ROX Chan 25 N48°51.28′ W95°41.70′ 064° 14.7 NM to fld. 1059/5E.
ROADD NDB (LOM) 360 SW N48°51.77′ W95°14.51′ 315° 6.3 NM to fld.
ILS/DME 110.1 I–SWE Chan 38 Rwy 31. LOM ROADD NDB.



LOC/DME I-SWE	APP CRS	Rwy Idg	5400
110.1	315°	TDZE	1074
Chan 38		Apt Elev	1074

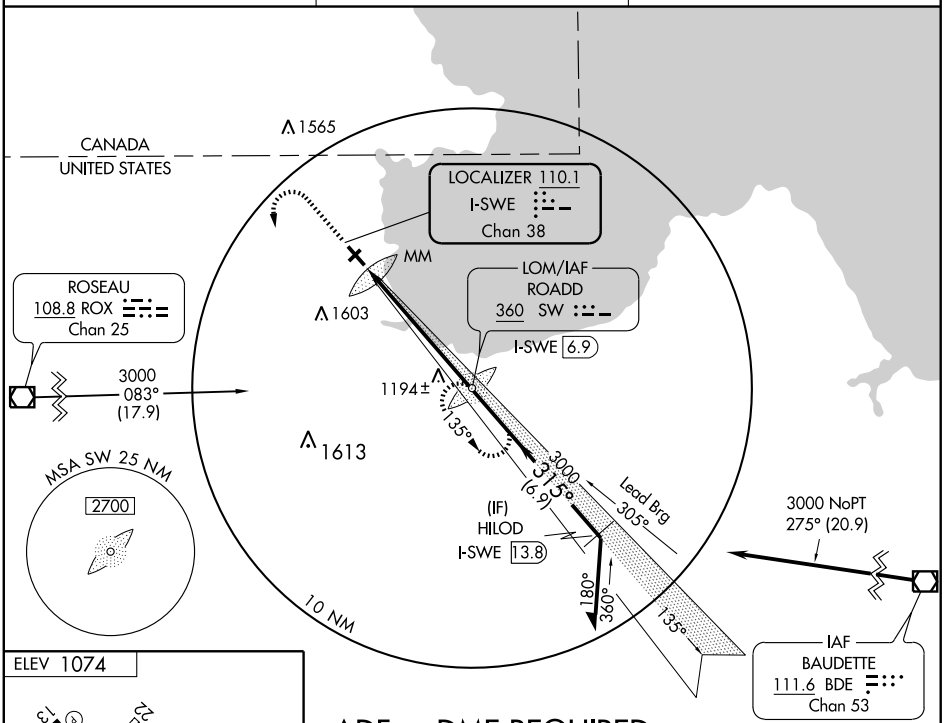
ILS or LOC RWY 31
WARROAD INTL MEMORIAL (RRT)

V
A NA

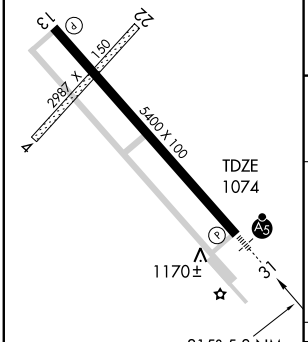
MALSR

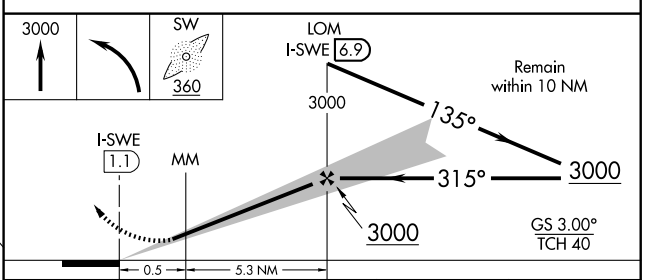
MISSED APPROACH: Climb to 3000 then left turn direct ROADD LOM and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.925	134.75 251.1	123.05 (CTAF) L



ADF or DME REQUIRED





HIRL Rwy 13-31 L
REIL Rwy 13 L

FAF to MAP 5.8 NM					
Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

CATEGORY	A	B	C	D
S-ILS 31	1274-½ 200 (200-½)			
S-LOC 31	1460-½ 386 (400-½)			1460-¾ 386 (400-¾)
CIRCLING	1500-1 426 (500-1)	1540-1 466 (500-1)	1540-1½ 466 (500-1½)	1640-2 566 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOM SW	APP CRS	Rwy Idg	5400
360	315°	TDZE	1074
		Apt Elev	1074

NDB RWY 31

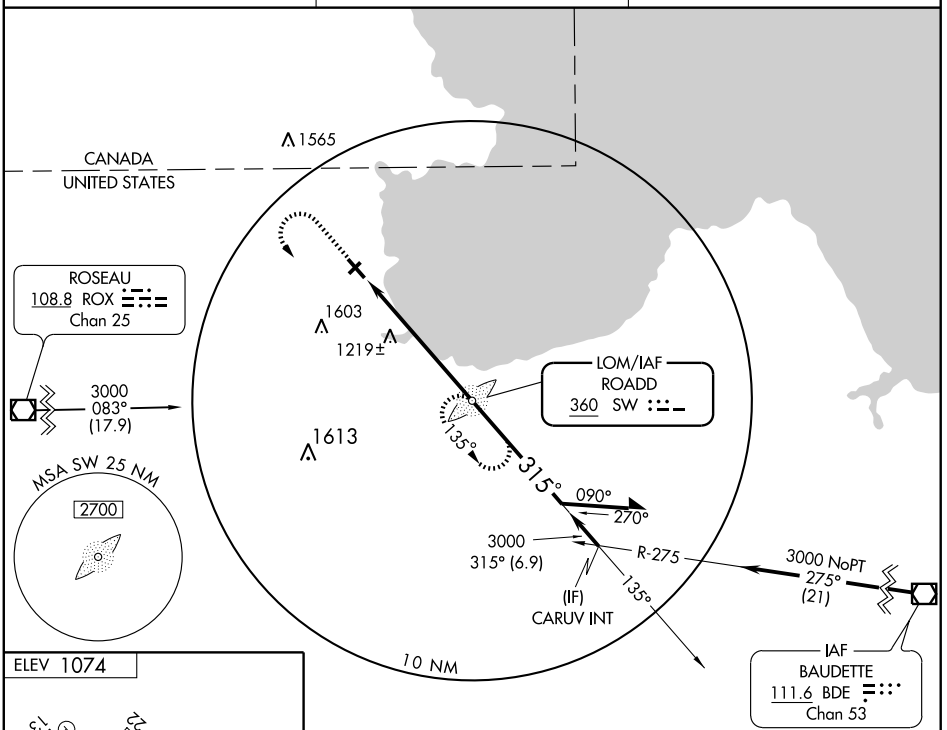
WARROAD INTL MEMORIAL (RRT)

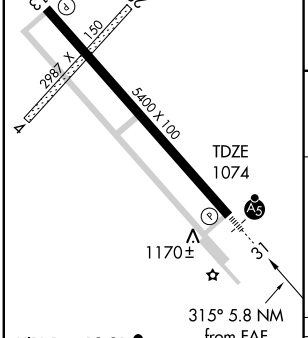
When local altimeter setting not received, use Roseau altimeter setting and increase all MDAs 40 feet and increase S-31 Cat C visibility ¼ mile.

MALSR

MISSED APPROACH: Climb to 3000 then left turn direct ROADD LOM and hold.

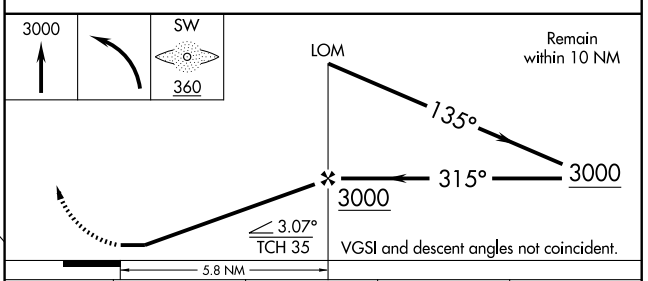
AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.925	134.75 251.1	123.05 (CTAF)





HIRL Rwy 13-31

REIL Rwy 13



FAF to MAP 5.8 NM					
Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

CATEGORY	A	B	C	D
S-31	1540-¾ 466 (500-¾)			1540-1¼ 466 (500-1¼)
CIRCLING	1540-1 466 (500-1)		1540-1½ 466 (500-1½)	1640-2 566 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 13

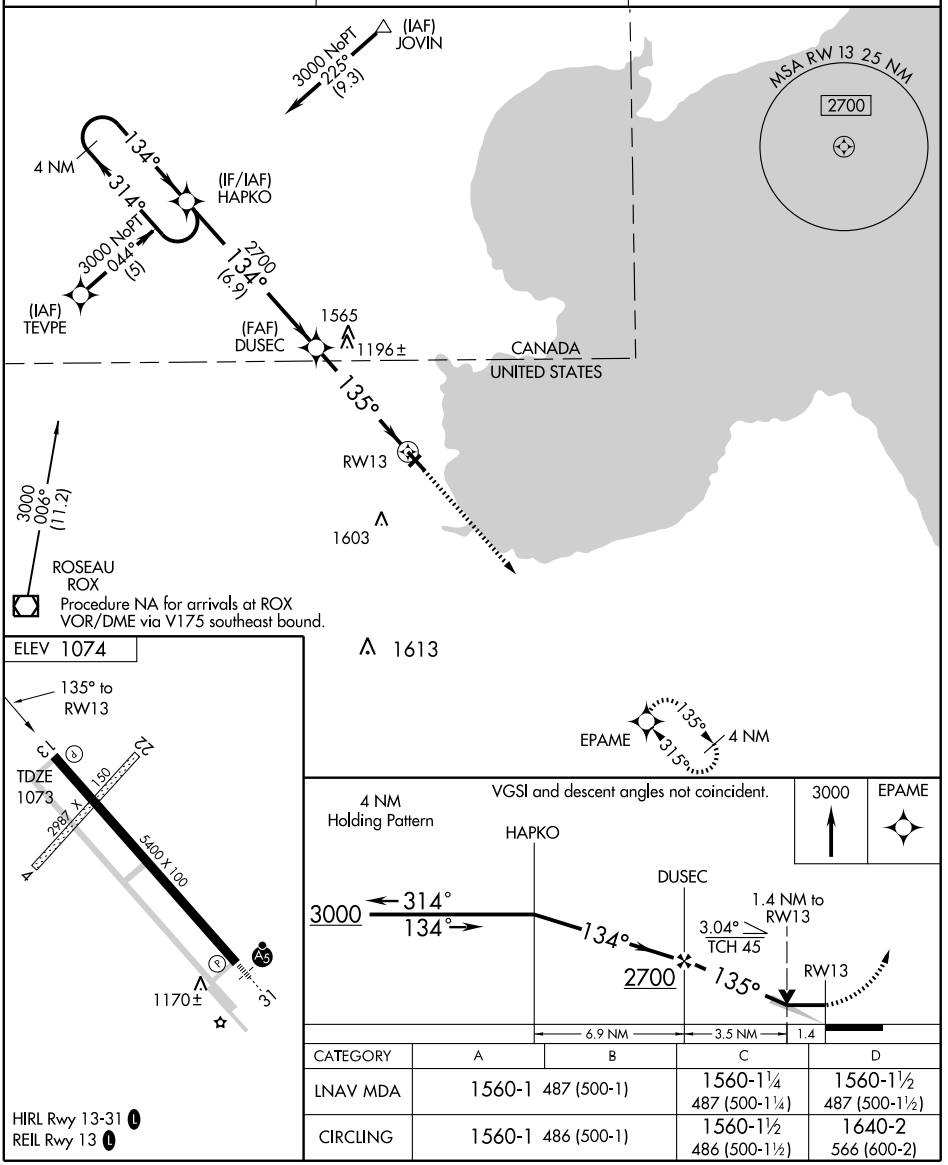
WARROAD INTL MEMORIAL (RRT)

APP CRS	Rwy ldg	5400
135°	TDZE	1073
	Apt Elev	1074

▼ DME/DME RNP-0.3 NA.
▲ When local altimeter setting not received, use Roseau altimeter setting and increase all MDAs 40 feet, and LNAV Cat C and D visibilities ¼ mile. VDP NA when using Roseau altimeter setting.

MISSED APPROACH: Climb to 3000 direct EPAME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.925	134.75 251.1	123.05 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	1560-1 487 (500-1)		1560-1¼ 487 (500-1¼)	1560-1½ 487 (500-1½)
CIRCLING	1560-1 486 (500-1)		1560-1½ 486 (500-1½)	1640-2 566 (600-2)

HIRL Rwy 13-31 L
REIL Rwy 13 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	5400
CH 42706	315°	TDZE	1074
W31A		Apt Elev	1074

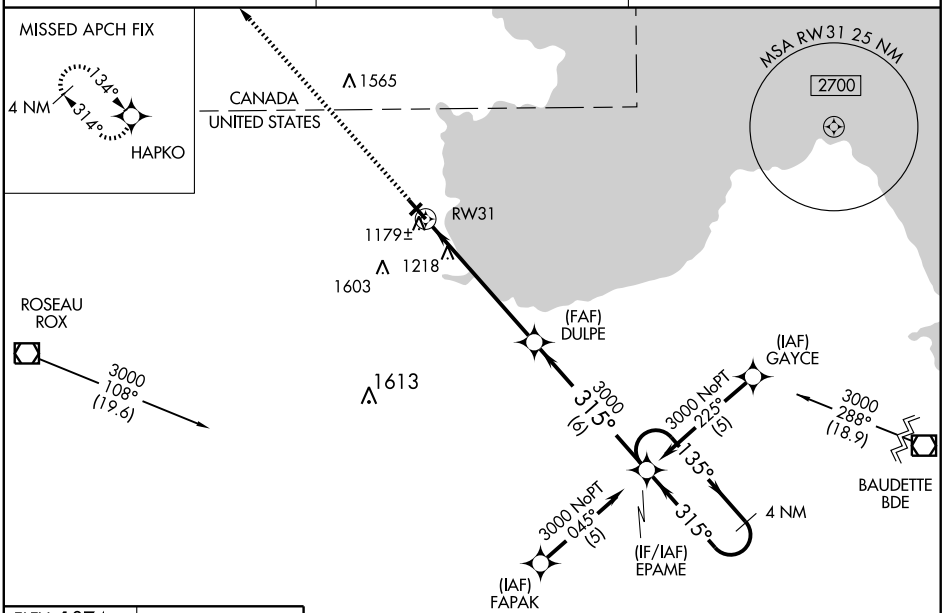
RNAV (GPS) RWY 31
WARROAD INTL MEMORIAL (RRT)

Baro-VNAV NA when using Roseau altimeter setting. DME/DME RNP-0.3 NA. When local altimeter setting not received, use Roseau altimeter setting and increase all DAs 36 feet and all MDAs 40 feet and increase, LNAV/VNAV all Cats and LNAV Cat D visibilites ¼ mile. VDP NA when using Roseau altimeter setting. For inoperative MALSR when using Roseau altimeter setting increase LPV all Cats visibility to 1 mile. For uncompensated Baro-VNAV systems, LNAV-VNAV NA below -17°C (2°F) or above 47°C (116°F).

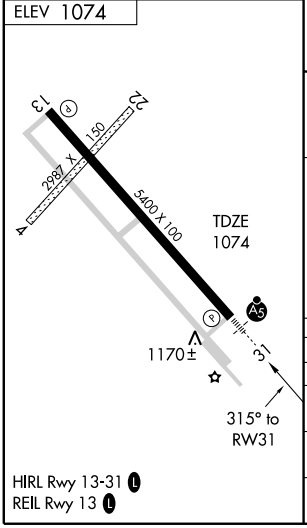
MALSR

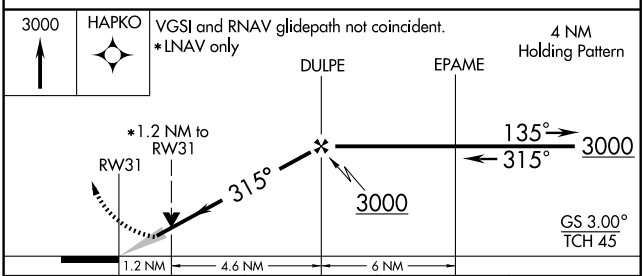
MISSED APPROACH: Climb to 3000 direct HAPKO and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
119.925	134.75 251.1	123.05 (CTAF) L



Procedure NA for arrivals at ROX VOR/DME via V175 northbound and arrivals at BDE VOR/DME via V217 southeast bound.

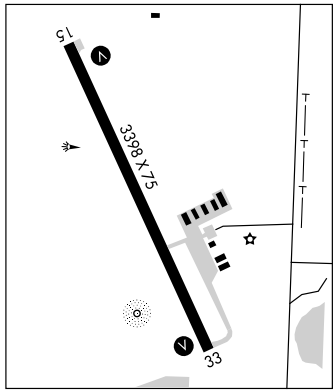




CATEGORY	A	B	C	D
LPV DA	1324-½ 250 (300-½)			
LNAV/VNAV DA	1449-¾ 375 (400-¾)			
LNAV MDA	1480-½ 406 (500-½)		1480-¾ 406 (500-¾)	1480-1 406 (500-1)
CIRCLING	1500-1 426 (500-1)	1540-1 466 (500-1)	1540-1½ 466 (500-1½)	1640-2 566 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WASECA MUNI (ACQ) 2 W UTC−6(−5DT) N44°04.41′ W93°33.18′ OMAHA
1126 B S4 **FUEL** 100LL NOTAM FILE ACQ L–12J
RWY 15–33: H3398X75 (ASPH) S–12.5 MIRL IAP
RWY 15: VASI(V2L)—GA 2.5° TCH 35′.
RWY 33: VASI(V2L)—GA 2.5° TCH 35′.
AIRPORT REMARKS: Attended Mon–Fri 1400–0000Z‡. For svc after hrs call 507–835–5236. Parachute Jumping. Ultralight tfc on and invof arpt. Birds on and invof arpt. MIRL Rwy 15–33 preset on low ints, increase ints and ACTIVATE VASI Rwy 15 and Rwy 33—CTAF. NOTE: See Special Notices—Aerobatic Practice Areas.
WEATHER DATA SOURCES: AWOS–3 371 ACQ (507) 835–3657.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 132.35
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
HALFWAY (T) VORW/DME 111.2 FOW Chan 49 N44°12.27′ W93°22.23′ 223° 11.1 NM to fld. 1098/2E.
Unmonitored.
NDB (MHW) 371 ACQ N44°04.22′ W93°33.15′ at fld.
AWOS–3 NOTAM FILE ACQ.



WASKISH MUNI (VWU) 1 S UTC−6(−5DT) N48°09.06′ W94°31.98′ TWIN CITIES
1181 NOTAM FILE VWU
RWY 02–20: 3700X150 (TURF)
RWY 02: Trees.
AIRPORT REMARKS: Unattended. Some soft spots and weak turf. Rwy 02–20 marked with yellow cones.
WEATHER DATA SOURCES: AWOS–3 124.17 (218) 647–8415.
COMMUNICATIONS: CTAF 122.9

WAUBUN

JOLLY FISHERMAN SPB (M49) 17 E UTC−6(−5DT) N47°08.58′ W95°31.74′ TWIN CITIES
1499 NOTAM FILE PNM
WATERWAY 08–26: 5000X1800 (WATER)
SEAPLANE REMARKS: Attended May–Oct dalgt hrs; Nov–Apr unattended.
COMMUNICATIONS: CTAF 122.9

WELLS MUNI (68Y) 3 W UTC−6(−5DT) N43°44.00′ W93°47.01′ OMAHA
1119 B S4 **FUEL** 100LL NOTAM FILE PNM
RWY 17–35: 2912X198 (TURF) LIRL (NSTD)
RWY 17: Road.
AIRPORT REMARKS: Attended Mon–Fri 1330–0200Z‡. Ultralight tfc on and invof arpt. Rwy 17–35 marked with yellow cones. Rwy 17–35 LIRL NSTD due to spacing.
COMMUNICATIONS: CTAF 122.9

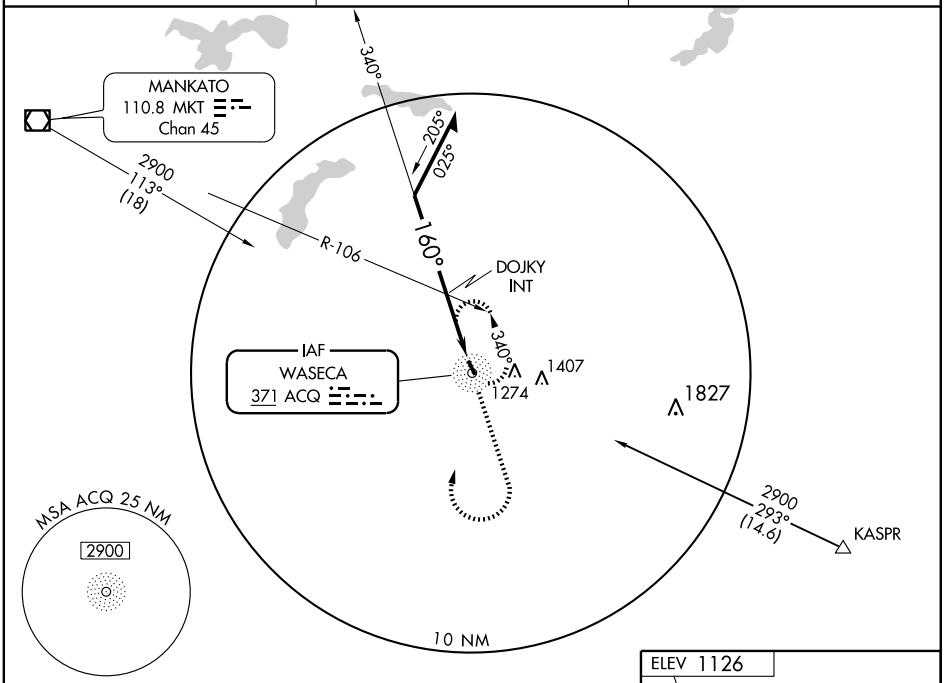
NDB ACQ	APP CRS	Rwy Idg	3398
371	160°	TDZE	1126
		Apt Elev	1126

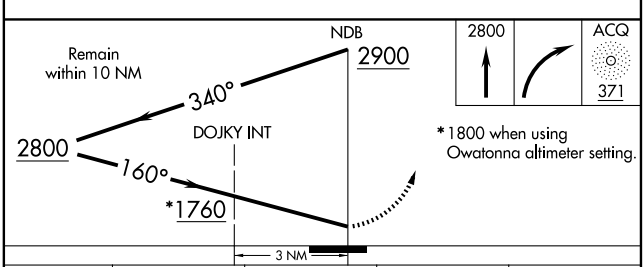
NDB RWY 15
WASECA MUNI (ACQ)

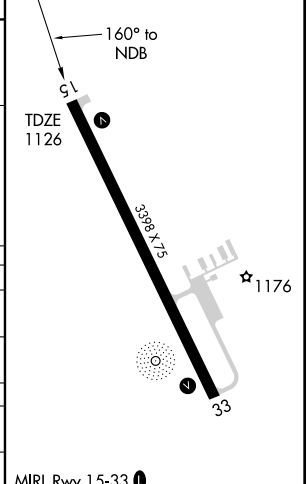
When local altimeter setting not received, use Owatonna altimeter setting and increase all MDA 40 feet and increase all Cat C visibilities ¼ mile.

MISSED APPROACH: Climb to 2800 then right turn direct ACQ NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
371	132.35 307.3	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-15	1760-1	634 (700-1)	1760-1¾ 634 (700-1¾)	NA
CIRCLING	1760-1	634 (700-1)	1760-1¾ 634 (700-1¾)	NA
DOJKY FIX MINIMUMS				
S-15	1720-1	594 (600-1)	1720-1½ 594 (600-1½)	NA
CIRCLING	1720-1	594 (600-1)	1720-1½ 594 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

APP CRS	Rwy Idg	3398
152°	TDZE	1126
	Apt Elev	1126

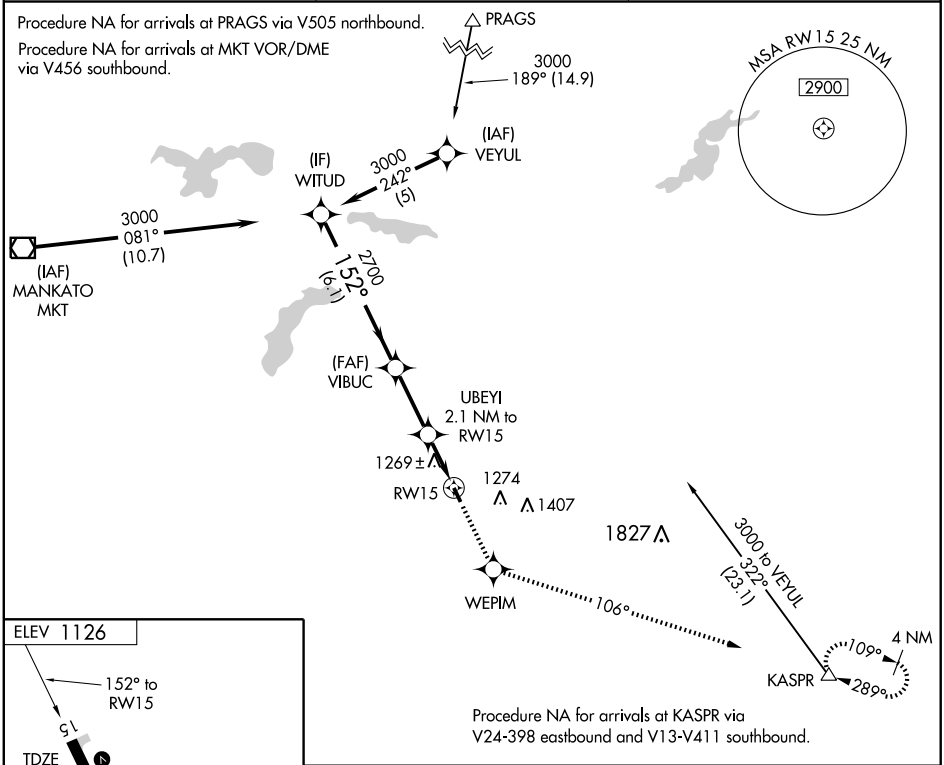
RNAV (GPS) RWY 15
WASECA MUNI (ACQ)

DME/DME RNP-0.3 NA.
VDP NA when using Owatonna altimeter setting.
When local altimeter setting not received, use Owatonna altimeter setting and increase all MDA 40 feet and LNAV Cat. C visibility ¼ mile.

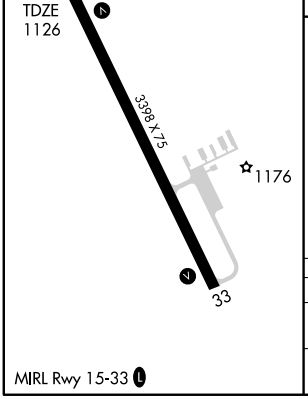
MISSED APPROACH: Climb to 3000 direct WEPIM and via 106° track to KASPR and hold.

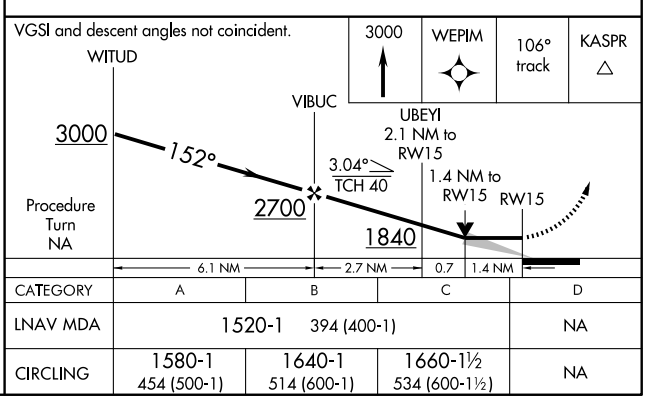
AWOS-3	MINNEAPOLIS CENTER	UNICOM
371	132.35 307.3	122.8 (CTAF) L

Procedure NA for arrivals at PRAGS via V505 northbound.
Procedure NA for arrivals at MKT VOR/DME via V456 southbound.



Procedure NA for arrivals at KASPR via V24-398 eastbound and V13-V411 southbound.





CATEGORY	A	B	C	D
LNAV MDA	1520-1 394 (400-1)			NA
CIRCLING	1580-1 454 (500-1)	1640-1 514 (600-1)	1660-1½ 534 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME FOW 111.2 Chan 49	APP CRS 223°	Rwy Idg N/A TDZE N/A Apt Elev 1126

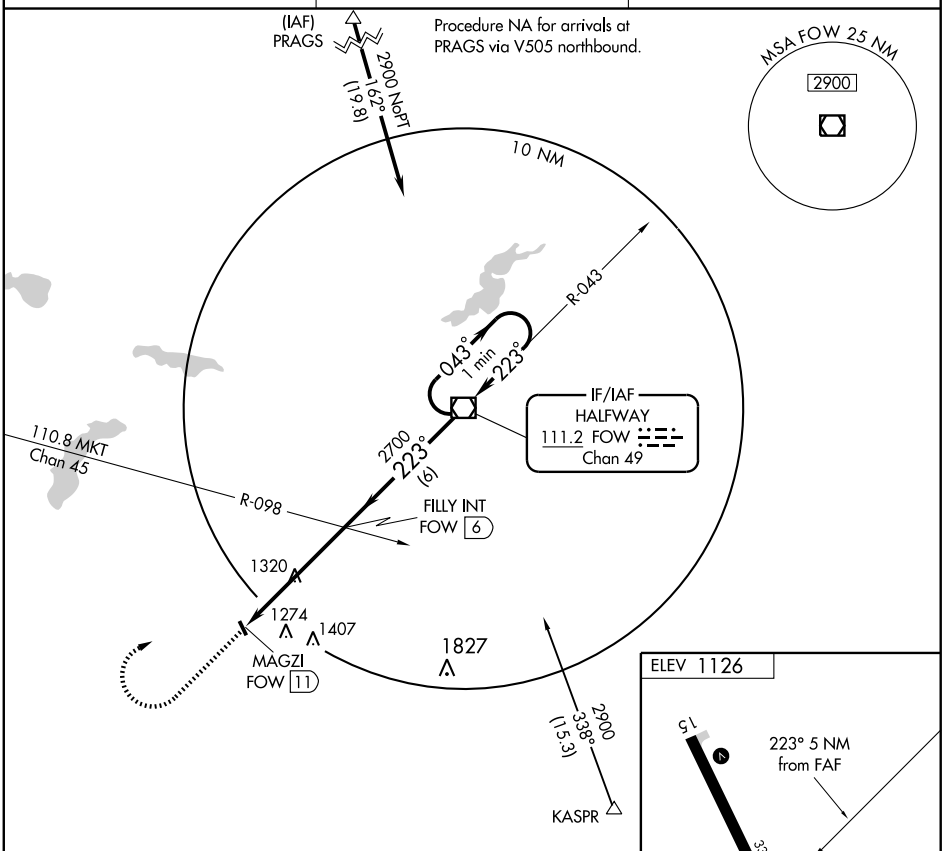
VOR-A
WASECA MUNI (ACQ)

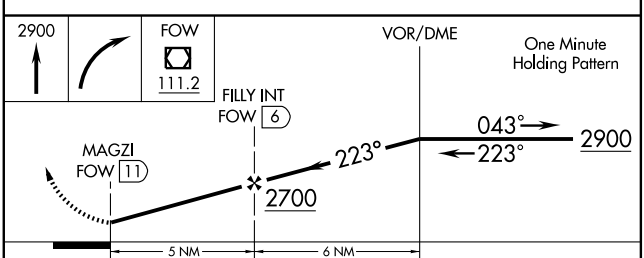
When local altimeter setting not received, use Owatonna altimeter setting and increase all MDA 40 feet.

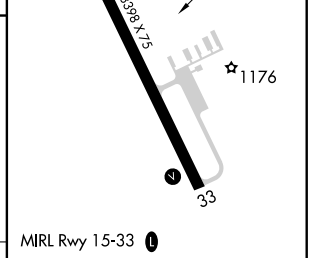
MISSED APPROACH: Climb to 2900 then right turn direct FOW VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
371	132.35 307.3	122.8 (CTAF)

NC-1, 21 OCT 2010 to 18 NOV 2010



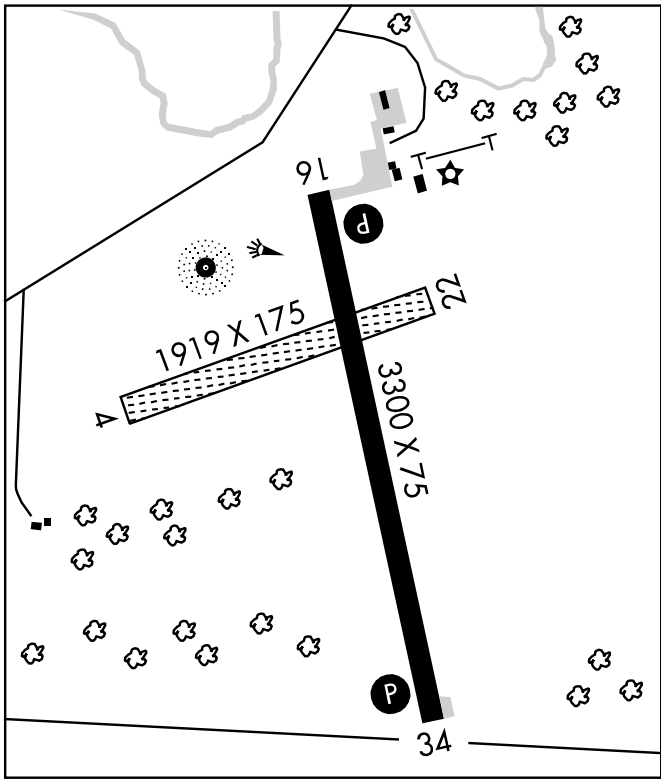




CATEGORY	A	B	C	D
CIRCLING	1620-1 494 (500-1)	1640-1 514 (600-1)	1660-1½ 534 (600-1½)	NA

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

WHEATON MUNI (ETH) 3 SW UTC−6(−5DT) N45°46.83′ W96°32.63′ **TWIN CITIES**
1025 B S4 **FUEL** 100LL NOTAM FILE ETH **L–14H**
RWY 16–34: H3300X75 (ASPH) MIRL **IAP**
RWY 16: PAPI(P2L)—GA 3.0° TCH 25′.
RWY 34: PAPI(P2L)—GA 3.0° TCH 25′. Road.
RWY 04–22: 1919X175 (TURF)
RWY 04: Tree. **RWY 22:** Crops.
AIRPORT REMARKS: Attended Apr–Sep daylight hours, Oct–Mar Mon–Fri 1400–2300Z‡. Rwy 04–22 CLOSED winter months. Rwy 04 marked with A–Frames painted orange and white. PAPI Rwy 34 unusable byd 8° left of course. Rwy 16–34 MIRL preset to low ints. To increase ints and ACTIVATE PAPI Rwy 16 and Rwy 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 326 ETH (320) 563–4975.
COMMUNICATIONS: CTAF 122.8 **UNICOM** 122.8
MORRIS RCO 122.25 (PRINCETON RADIO)
MINNEAPOLIS CENTER APP/DEP CON 126.1
RADIO AIDS TO NAVIGATION: NOTAM FILE MOX.
MORRIS (T) VORW/DME 109.6 MOX Chan 33 N45°33.95′ W95°58.15′ 293° 27.4 NM to fld. 1132/5E.
VOR/DME unmonitored.
NDB (MHW) 326 ETH N45°47.00′ W96°32.81′ at fld. NDB unusable byd 10 NM.
AWOS–3. NOTAM FILE ETH. Unmonitored.



WILLMAR N45°07.05′ W95°05.44′ NOTAM FILE PNM. **TWIN CITIES**
RCO 122.15 (PRINCETON RADIO). **L–12I, 14H**

WILLMAR MUNI–JOHN L. RICE FLD (BDH) 2 W UTC−6(−5DT) N45°07.02′ W95°07.76′ **TWIN CITIES**
1126 B S4 **FUEL** 100LL, JET A NOTAM FILE BDH **H–2J, L–12I, 14H**
RWY 13–31: H5500X100 (ASPH) HIRL **IAP**
RWY 13: PAPI (P4R). **RWY 31:** REIL. PAPI (P4L).
RWY 03–21: 2980X250 (TURF)
RWY 21: Ground.
AIRPORT REMARKS: Attended 1400Z‡–2300Z‡. Fuel self svc avbl with credit card. Rwy 03–21 has bare spots and small brush in some areas. Old arpt 1 mile east is closed permanently. NSTD markings Rwy 03 and Rwy 21 marked with yellow cones. Rwy 13–31 200′ pavement byd rwy, both ends. When wind is calm use Rwy 13. HIRL Rwy 13–31 preset to low ints, to increase ints and ACTIVATE PAPI Rwy 13 and Rwy 31 and REIL Rwy 31—CTAF.
WEATHER DATA SOURCES: AWOS–3 113.7 BDH (320) 235–8287.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 125.5.
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
(T) VORW/DME 113.7 BDH Chan 84 N45°07.06′ W95°07.62′ at fld. 1125/4E. **AWOS–3.** Unmonitored.
ILS 109.5 I–BDH Rwy 13. Class IC. LOC only.

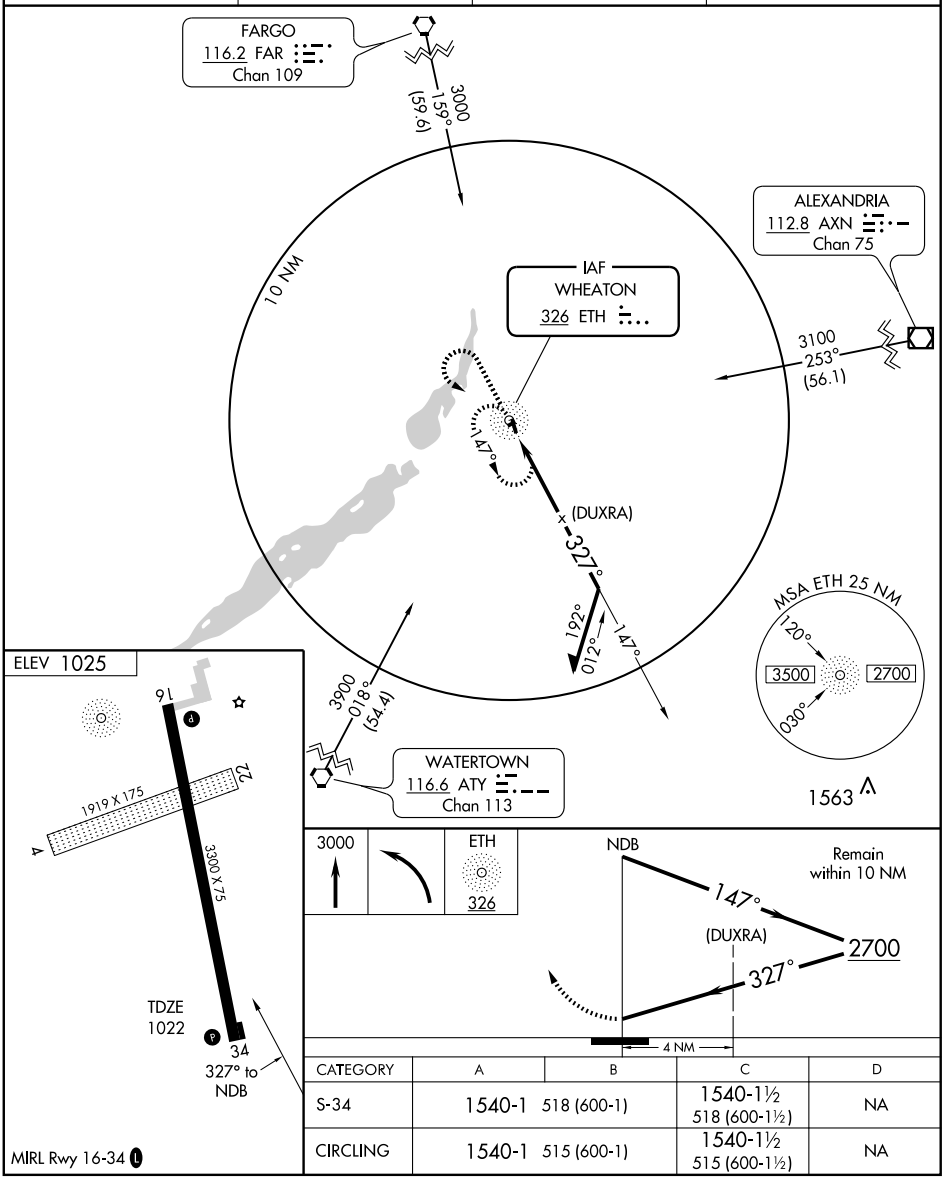
NDB ETH	APP CRS	Rwy Idg	3300
326	327°	TDZE	1022
		Apt Elev	1025

NDB or GPS RWY 34
WHEATON MUNI (ETH)

NA

MISSED APPROACH: Climb to 3000 then left turn direct ETH NDB and hold.

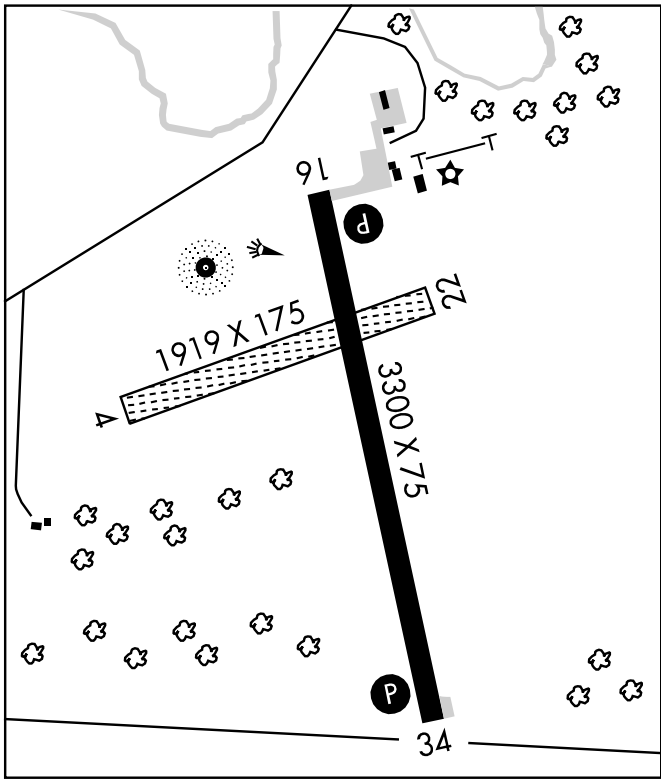
AWOS-3	MINNEAPOLIS CENTER	PRINCETON RADIO	UNICOM
326	126.1 269.2	122.25	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-34	1540-1	518 (600-1)	1540-1½ 518 (600-1½)	NA
CIRCLING	1540-1	515 (600-1)	1540-1½ 515 (600-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WHEATON MUNI (ETH) 3 SW UTC−6(−5DT) N45°46.83′ W96°32.63′ **TWIN CITIES**
1025 B S4 **FUEL** 100LL NOTAM FILE ETH **L–14H**
RWY 16–34: H3300X75 (ASPH) MIRL **IAP**
RWY 16: PAPI(P2L)—GA 3.0° TCH 25′.
RWY 34: PAPI(P2L)—GA 3.0° TCH 25′. Road.
RWY 04–22: 1919X175 (TURF)
RWY 04: Tree. **RWY 22:** Crops.
AIRPORT REMARKS: Attended Apr–Sep daylight hours, Oct–Mar Mon–Fri 1400–2300Z‡. Rwy 04–22 CLOSED winter months. Rwy 04 marked with A–Frames painted orange and white. PAPI Rwy 34 unusable byd 8° left of course. Rwy 16–34 MIRL preset to low ints. To increase ints and ACTIVATE PAPI Rwy 16 and Rwy 34—CTAF.
WEATHER DATA SOURCES: AWOS–3 326 ETH (320) 563–4975.
COMMUNICATIONS: CTAF 122.8 **UNICOM** 122.8
MORRIS RCO 122.25 (PRINCETON RADIO)
MINNEAPOLIS CENTER APP/DEP CON 126.1
RADIO AIDS TO NAVIGATION: NOTAM FILE MOX.
MORRIS (T) VORW/DME 109.6 MOX Chan 33 N45°33.95′ W95°58.15′ 293° 27.4 NM to fld. 1132/5E.
VOR/DME unmonitored.
NDB (MHW) 326 ETH N45°47.00′ W96°32.81′ at fld. NDB unusable byd 10 NM.
AWOS–3. NOTAM FILE ETH. Unmonitored.



WILLMAR N45°07.05′ W95°05.44′ NOTAM FILE PNM. **TWIN CITIES**
RCO 122.15 (PRINCETON RADIO). **L–12I, 14H**

WILLMAR MUNI–JOHN L. RICE FLD (BDH) 2 W UTC−6(−5DT) N45°07.02′ W95°07.76′ **TWIN CITIES**
1126 B S4 **FUEL** 100LL, JET A NOTAM FILE BDH **H–2J, L–12I, 14H**
RWY 13–31: H5500X100 (ASPH) HIRL **IAP**
RWY 13: PAPI (P4R). **RWY 31:** REIL. PAPI (P4L).
RWY 03–21: 2980X250 (TURF)
RWY 21: Ground.
AIRPORT REMARKS: Attended 1400Z‡–2300Z‡. Fuel self svc avbl with credit card. Rwy 03–21 has bare spots and small brush in some areas. Old arpt 1 mile east is closed permanently. NSTD markings Rwy 03 and Rwy 21 marked with yellow cones. Rwy 13–31 200′ pavement byd rwy, both ends. When wind is calm use Rwy 13. HIRL Rwy 13–31 preset to low ints, to increase ints and ACTIVATE PAPI Rwy 13 and Rwy 31 and REIL Rwy 31—CTAF.
WEATHER DATA SOURCES: AWOS–3 113.7 BDH (320) 235–8287.
COMMUNICATIONS: CTAF/UNICOM 122.8
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 125.5.
RADIO AIDS TO NAVIGATION: NOTAM FILE PNM.
(T) VORW/DME 113.7 BDH Chan 84 N45°07.06′ W95°07.62′ at fld. 1125/4E. **AWOS–3.** Unmonitored.
ILS 109.5 I–BDH Rwy 13. Class IC. LOC only.

LOC I-BDH	APP CRS	Rwy Idg	5500
109.5	126°	TDZE	1124
		Apt Elev	1126

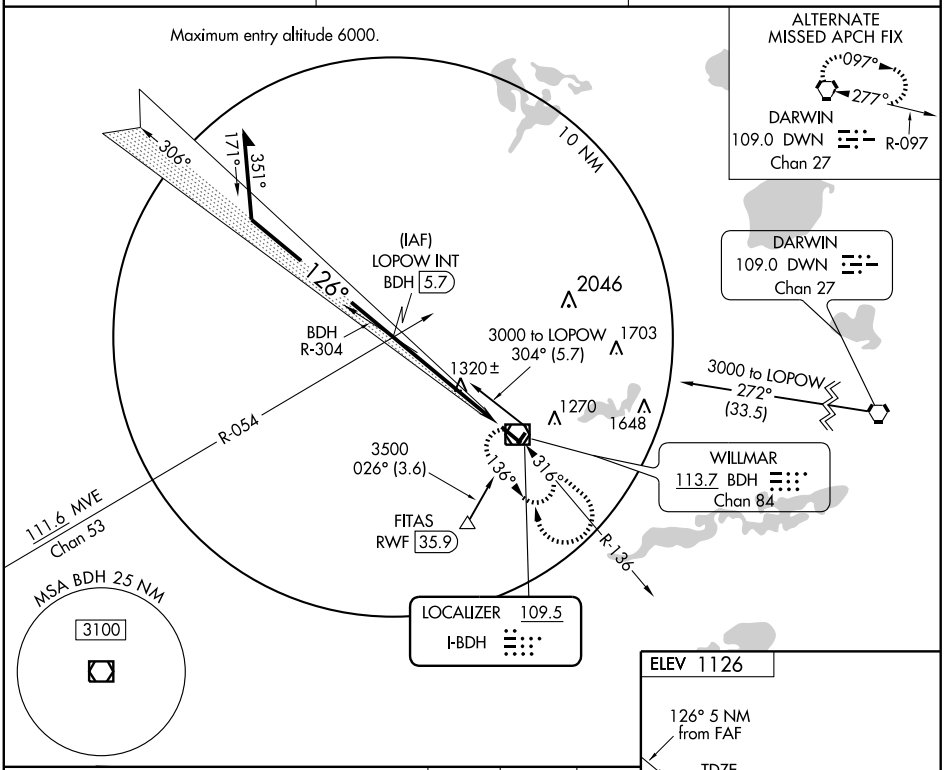
ILS or LOC RWY 13

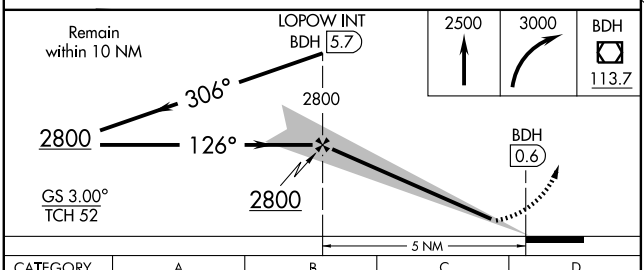
WILLMAR MUNI-JOHN L RICE FIELD (BDH)

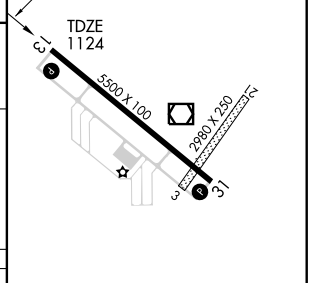
If local altimeter setting not received, use Olivia Rgnl altimeter setting and increase all DAs 55 feet and all MDAs 60 feet.

MISSED APPROACH: Climb to 2500 then climbing right turn to 3000 direct BDH VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
113.7	125.5 323.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 13	1324-¾ 200 (200-¾)			
S-LOC 13	1620-1 496 (500-1)		1620-1¼ 496 (500-1¼)	1620-1½ 496 (500-1½)
CIRCLING	1620-1 494 (500-1)		1620-1½ 494 (500-1½)	1680-2 554 (600-2)

HIRL Rwy 13-31 L
REIL Rwy 31 L

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WAAS	APP CRS	Rwy Idg	5500
CH 93902	126°	TDZE	1124
W13A		Apt Elev	1126

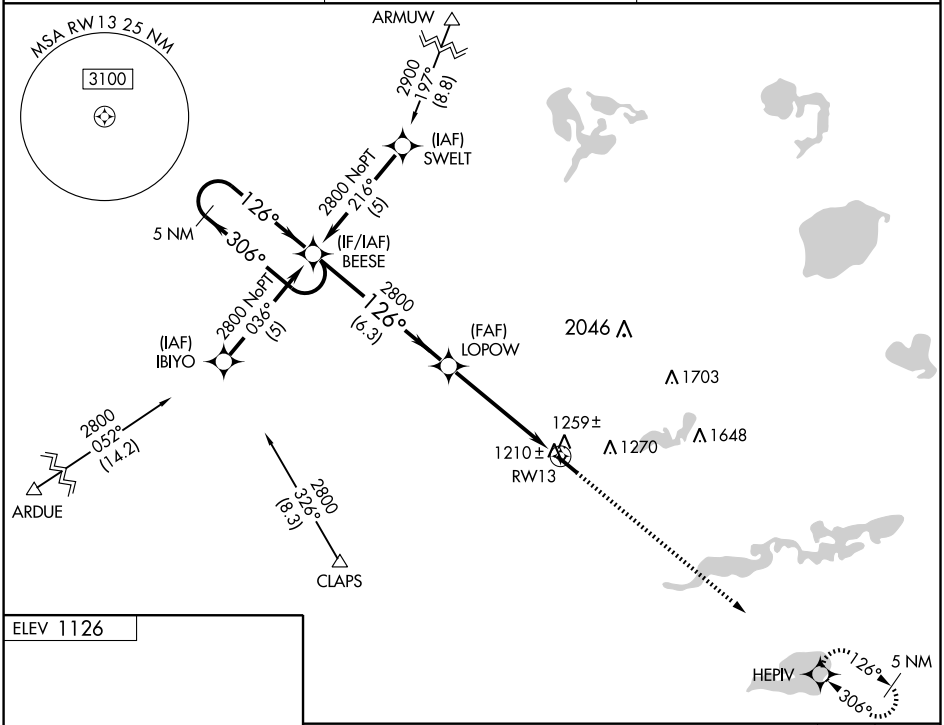
RNAV (GPS) RWY 13

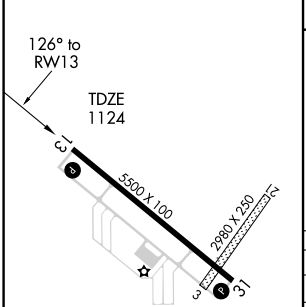
WILLMAR MUNI-JOHN L RICE FIELD (BDH)

▼ If local altimeter setting not received, use Olivia Rgnl altimeter setting and increase all DAs/MDAs 60 feet. DME/DME RNP -0.3 NA.
▲ For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (116°F).
Baro-VNAV and VDP NA when using Olivia Rgnl altimeter setting.

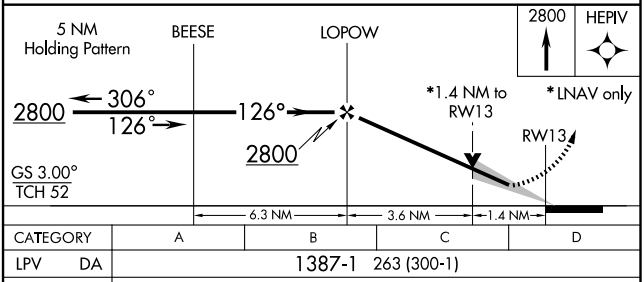
MISSED APPROACH: Climb to 2800 direct HEPIV and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
113.7	125.5 323.1	122.8 (CTAF) L





HIRL Rwy 13-31 L
REIL Rwy 31 L



CATEGORY	A	B	C	D
LPV DA	1387-1 263 (300-1)			
LNAV/VNAV DA	1480-1¼ 356 (400-1¼)			
LNAV MDA	1620-1 496 (500-1)		1620-1¼ 496 (500-1¼)	1620-1½ 496 (500-1½)
CIRCLING	1620-1 494 (500-1)		1620-1½ 494 (500-1½)	1680-2 554 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 31

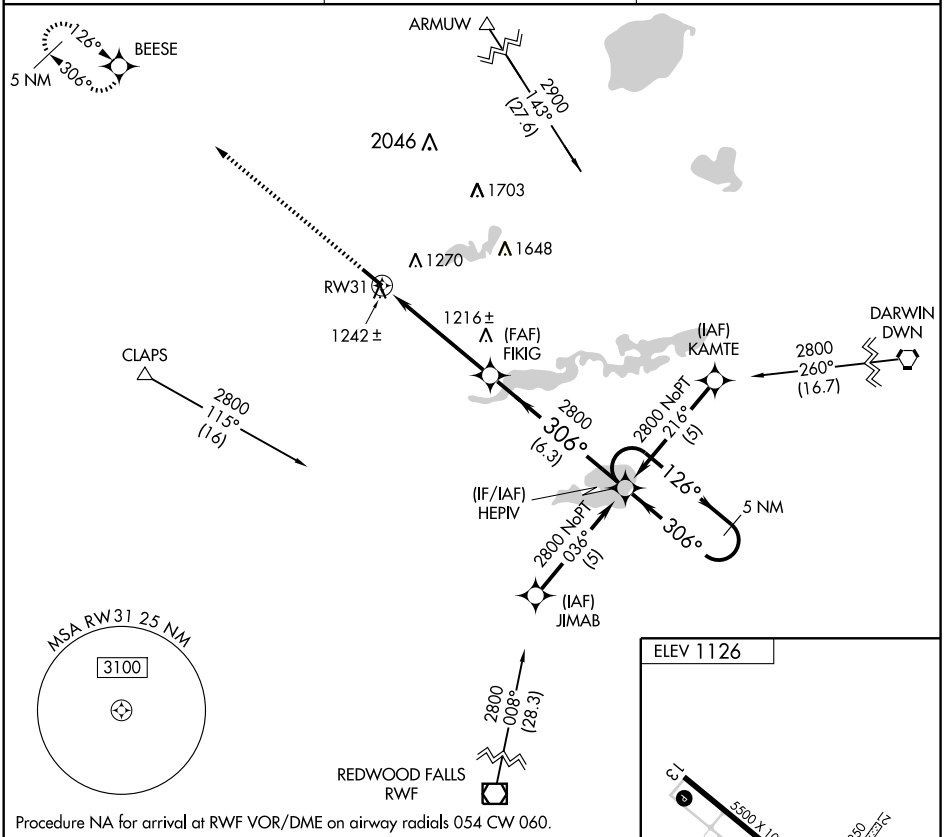
WILLMAR MUNI-JOHN L RICE FIELD (BDH)

APP CRS	Rwy Idg	5500
306°	TDZE	1126
	Apt Elev	1126

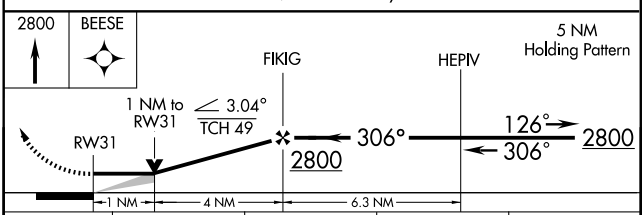
T A — If local altimeter setting not received, use Olivia Rgnl altimeter setting and increase all MDAs 60 feet. VDP NA with Olivia Rgnl altimeter setting. DME/DME RNP -0.3 NA.

MISSED APPROACH: Climb to 2800 direct BEESE and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
113.7	125.5 323.1	122.8 (CTAF) L



Procedure NA for arrival at RWF VOR/DME on airway radials 054 CW 060.



CATEGORY	A	B	C	D
LNAV MDA	1500-1 374 (400-1)			1500-1¼ 374 (400-1¼)
CIRCLING	1520-1 394 (400-1)	1580-1 454 (500-1)	1580-1½ 454 (500-1½)	1680-2 554 (600-2)

HIRL Rwy 13-31 L
REIL Rwy 31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME BDH	APP CRS	Rwy Idg	5500
113.7	119°	TDZE	1124
Chan 84		Apt Elev	1126

VOR RWY 13

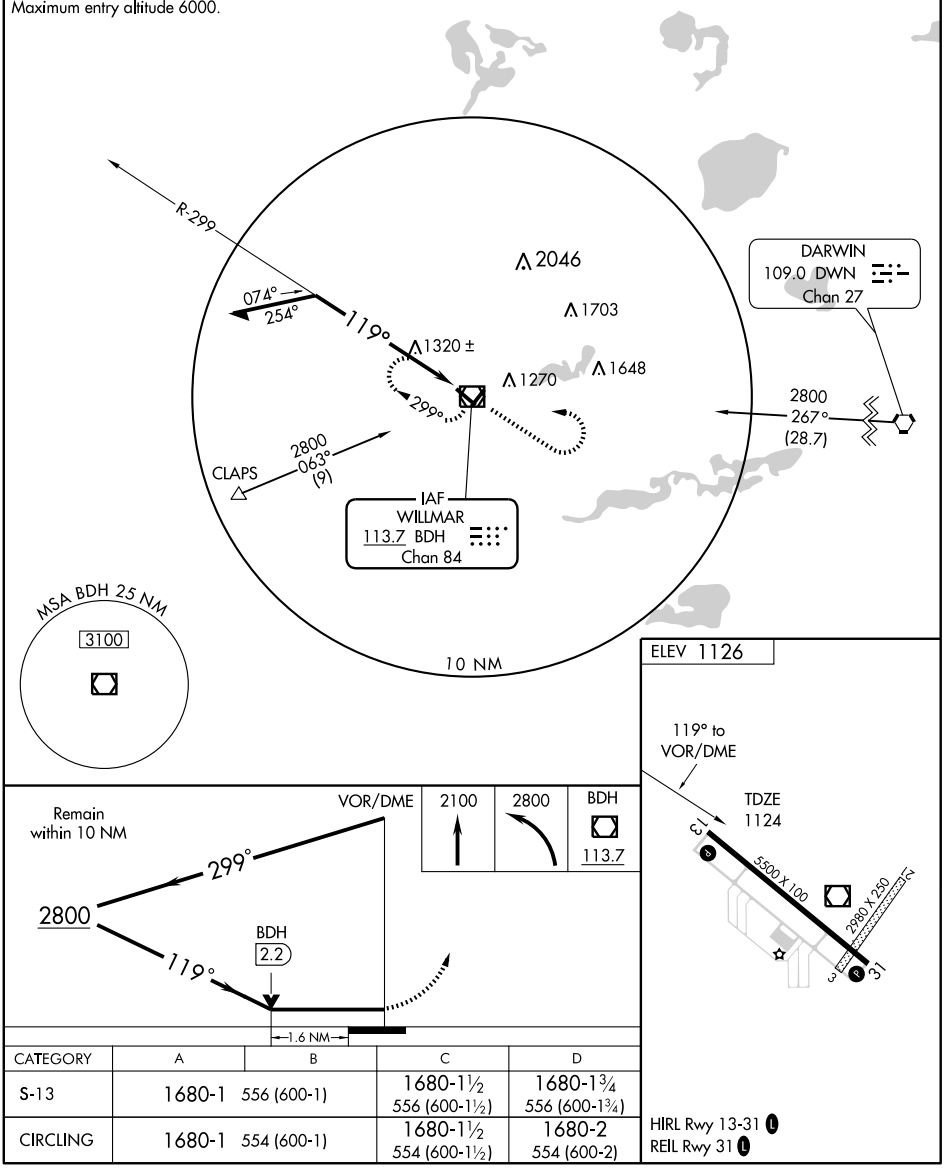
WILLMAR MUNI-JOHN L RICE FIELD (BDH)

If local altimeter setting not received, use Olivia Rgnl altimeter setting and increase all MDAs 60 feet.
VDP NA with Olivia Rgnl altimeter setting.

MISSED APPROACH: Climb to 2100, then climbing left turn to 2800 direct BDH VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
113.7	125.5 323.1	122.8 (CTAF) L

Maximum entry altitude 6000.



CATEGORY	A	B	C	D
S-13	1680-1	556 (600-1)	1680-1½ 556 (600-1½)	1680-1¾ 556 (600-1¾)
CIRCLING	1680-1	554 (600-1)	1680-1½ 554 (600-1½)	1680-2 554 (600-2)

HIRL Rwy 13-31 L
REIL Rwy 31 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME BDH	APP CRS	Rwy Idg	5500
113.7	316°	TDZE	1126
Chan 84		Apt Elev	1126

VOR RWY 31

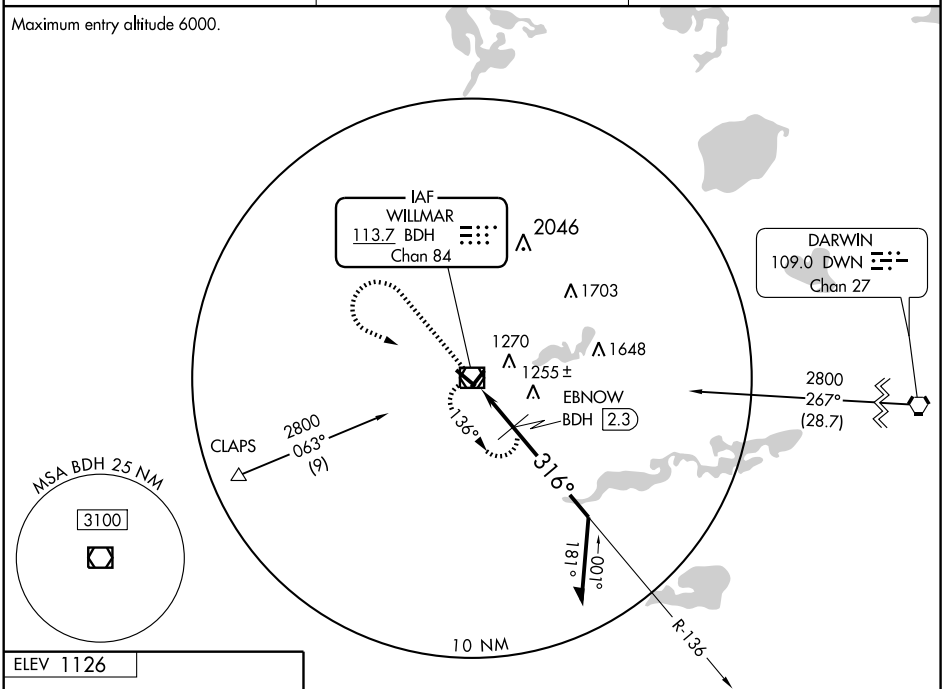
WILLMAR MUNI-JOHN L RICE FIELD (BDH)

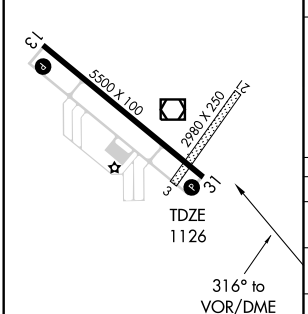
If local altimeter setting not received, use Olivia Rgnl altimeter setting and increase all MDAs 60 feet.
VDP NA with Olivia Rgnl altimeter setting.

MISSED APPROACH: Climb to 2000, then climbing left turn to 2800 direct BDH VOR/DME and hold.

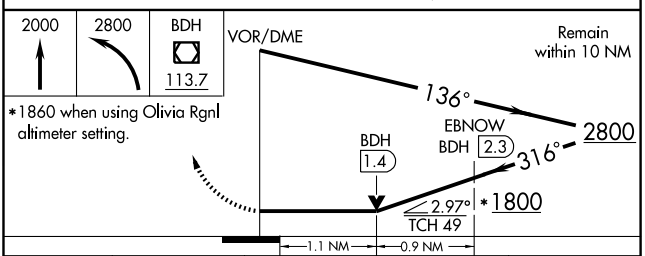
AWOS-3	MINNEAPOLIS CENTER	UNICOM
113.7	125.5 323.1	122.8 (CTAF) L

Maximum entry altitude 6000.





HIRL Rwy 13-31 L
REIL Rwy 31 L

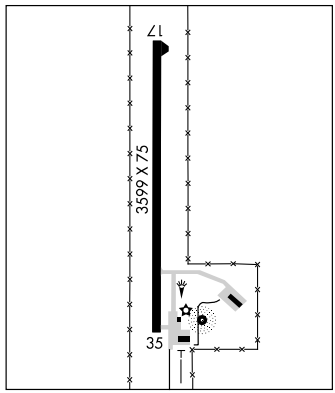


*1860 when using Olivia Rgnl altimeter setting.

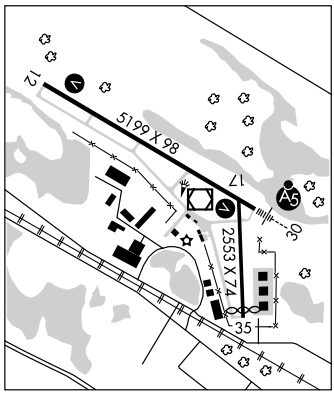
CATEGORY	A	B	C	D
S-31	1800-1	674 (700-1)	1800-2 674 (700-2)	1800-2¼ 674 (700-2¼)
CIRCLING	1800-1	674 (700-1)	1800-2 674 (700-2)	1800-2¼ 674 (700-2¼)
EBNOW FIX MINIMUMS				
S-31	1520-1 394 (400-1)			1520-1¼ 394 (400-1¼)
CIRCLING	1520-1 394 (400-1)	1580-1 454 (500-1)	1580-1½ 454 (500-1½)	1680-2 554 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WINDOM MUNI (MWM) 3 N UTC−6(−5DT) N43°54.80′ W95°06.56′ OMAHA
1410 B **FUEL** 100LL NOTAM FILE MWM L–12I
RWY 17–35: H3599X75 (ASPH) S–15, D–20 MIRL IAP
RWY 17: REIL. **RWY 35:** REIL.
AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Birds on and invof arpt. Rwy 17–35 bumpy ride, multiple cracks. ACTIVATE MIRL Rwy 17–35 and REIL Rwy 17 and Rwy 35—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.525 (507) 831–1833.
COMMUNICATIONS: CTAF 122.9
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.1.
RADIO AIDS TO NAVIGATION: NOTAM FILE RWF.
REDWOOD FALLS (H) VORW/DME 113.3 RWF Chan 80 N44°28.04′ W95°07.69′ 172° 33.2 NM to fld. 1061/7E. **HIWAS.**
NDB (MHW) 203 MWM N43°54.56′ W95°06.55′ at fld. NOTAM FILE MWM.



WINONA MUNI–MAX CONRAD FLD (ONA) 3 NW UTC−6(−5DT) N44°04.63′ W91°42.50′ GREEN BAY
656 B S4 **FUEL** 100LL, JET A NOTAM FILE ONA H–2J, L–28F
RWY 12–30: H5199X98 (ASPH) S–30, D–55 MIRL IAP
RWY 12: REIL. VASI(V4L)—GA 3.0° TCH 42′. Trees.
RWY 30: MALSR. VASI(V4L)—GA 3.0° TCH 42′. Trees. Rgt tfc.
RWY 17–35: H2553X74 (ASPH)
RWY 17: Trees. **RWY 35:** Thld dsplcd 151′. Trees. Rgt tfc.
AIRPORT REMARKS: Attended 1400–2300Z‡. Deer and waterfowl on and invof arpt. Rwy 17–35 grass growing through cracks, pavement bleached. MIRL Rwy 12–30 preset on low ints, to increase ints and ACTIVATE VASI Rwy 12 and Rwy 30, REIL Rwy 12 and MALSR Rwy 30—CTAF.
WEATHER DATA SOURCES: AWOS–3 111.4 ONA (507) 453–2991.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.15 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 128.6
RADIO AIDS TO NAVIGATION: NOTAM FILE ONA.
(T) VORW/DME 111.4 ONA Chan 51 N44°04.57′ W91°42.34′ at fld. 654/1E. **AWOS–3.** Unmonitored.
VOR/DME unusable:
107°–117° byd 17 NM
118°–316°
317°–327° byd 17 NM
328°–106°
LOC/DME 109.35 I–ONA Chan 30(Y) Rwy 30.



WINSTED MUNI (1ØD) 1 SW UTC−6(−5DT) N44°57.00′ W94°04.02′ TWIN CITIES
1030 B **FUEL** 100LL NOTAM FILE PNM
RWY 09–27: 3248X200 (TURF) LIRL
RWY 09: Road. **RWY 27:** Trees.
AIRPORT REMARKS: Attended 1400–0000Z‡. Fuel avbl 24 hrs with credit card. Ultralight activity on and invof arpt. Be alert of ultralight tfc in lower pattern. Rwy 09–27 marked with yellow cones.
COMMUNICATIONS: CTAF 122.9

WIPLINE SPB (See INVER GROVE HEIGHTS)

WONDD N43°37.04′ W95°27.84′ NOTAM FILE OTG. OMAHA
NDB (LOM) 277 OT 287° 5.5 NM to Worthington Muni. OTS indef.

NDB MWM 203	APP CRS 177°	Rwy Idg 3599 TDZE 1410 Apt Elev 1410

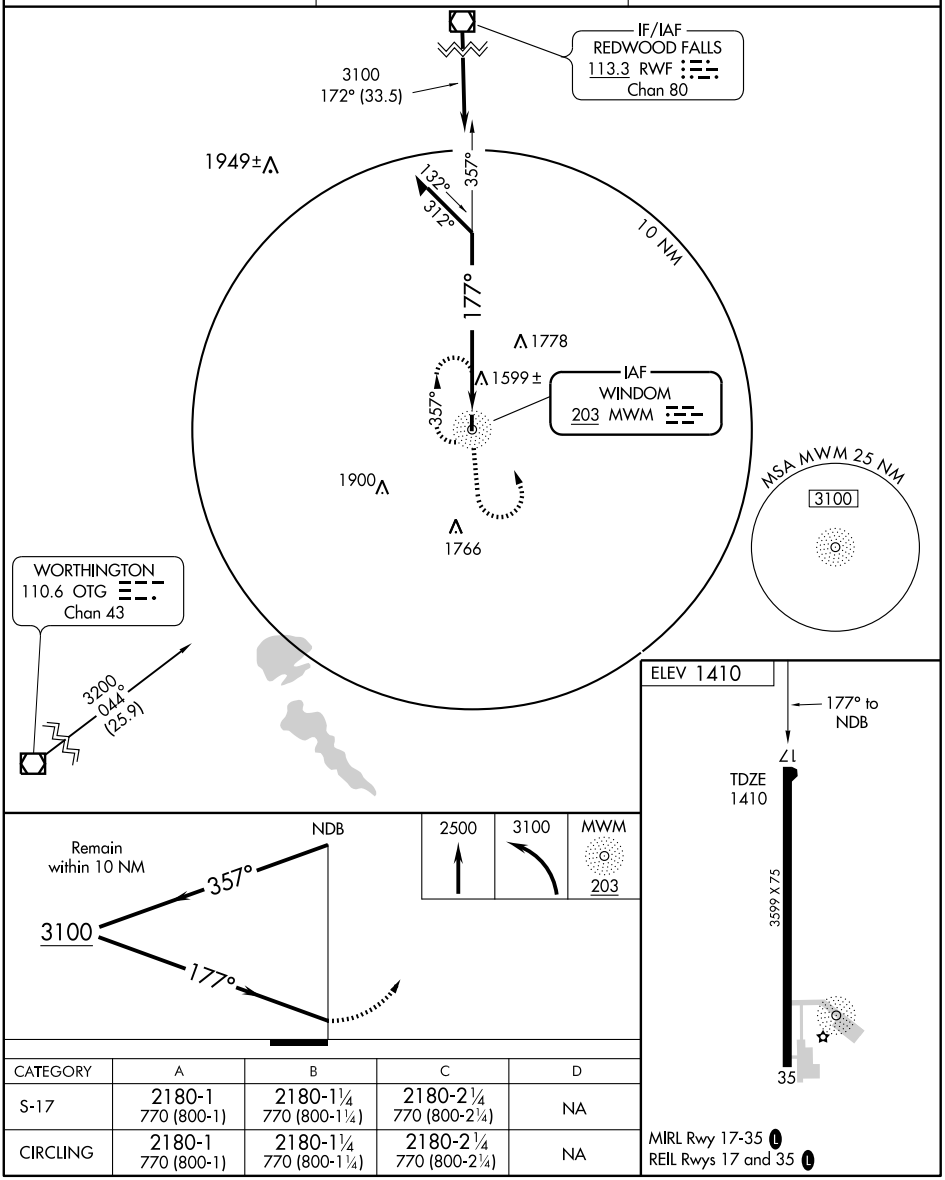
NDB RWY 17

WINDOM MUNI (MWM)

⚠ Circling not authorized at night to Rwy 35.

MISSED APPROACH: Climb to 2500 then climbing left turn to 3100 direct MWM NDB and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.525	127.1 290.2	122.9 (L)



CATEGORY	A	B	C	D
S-17	2180-1 770 (800-1)	2180-1¼ 770 (800-1¼)	2180-2¼ 770 (800-2¼)	NA
CIRCLING	2180-1 770 (800-1)	2180-1¼ 770 (800-1¼)	2180-2¼ 770 (800-2¼)	NA

MIRL Rwy 17-35 (L)
REIL Rwys 17 and 35 (L)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 17

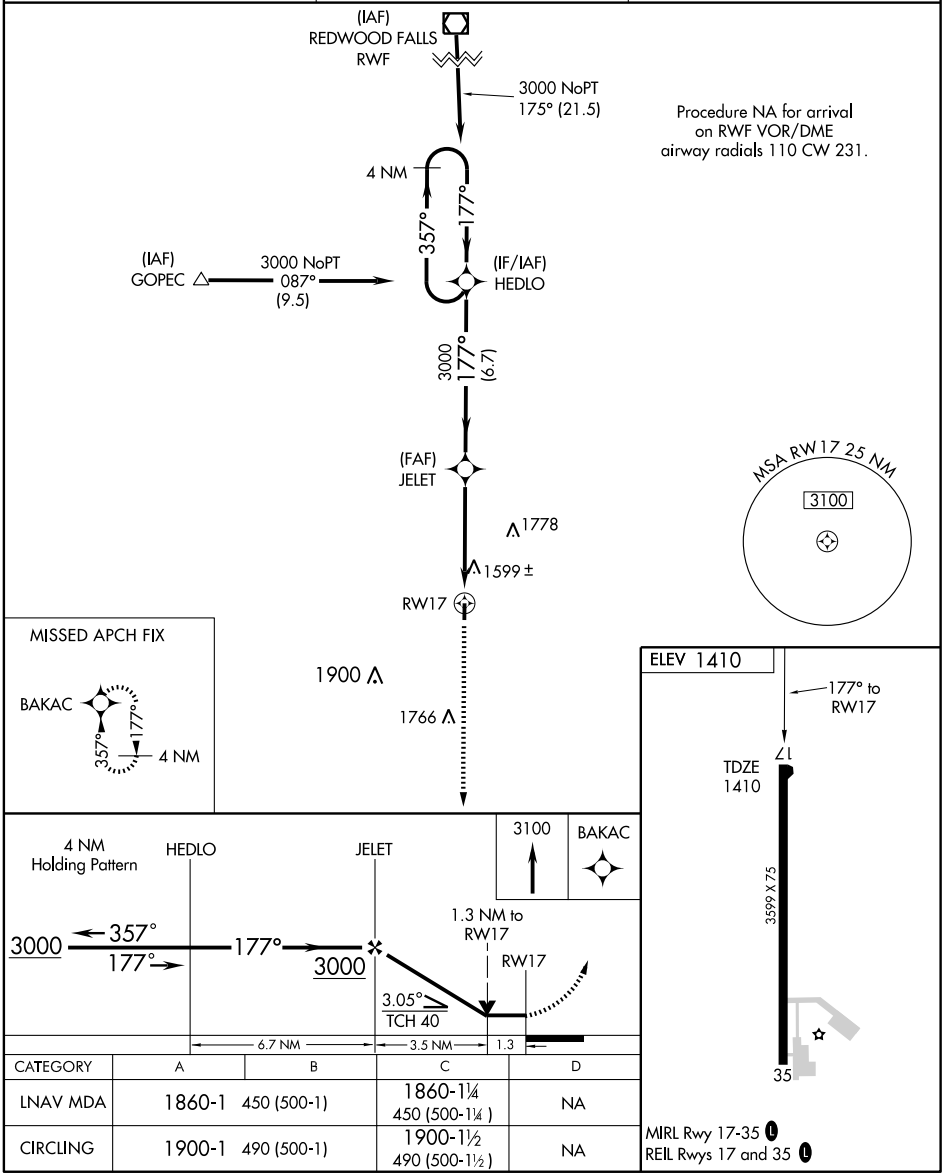
WINDOM MUNI (MWM)

APP CRS	Rwy Idg	3599
177°	TDZE	1410
	Apt Elev	1410

NA — GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Circling not authorized at night to Rwy 35.

MISSED APPROACH: Climb to 3100 direct BAKAC and hold.

AWOS-3	MINNEAPOLIS CENTER	CTAF
118.525	127.1 290.2	122.9 (L)



CATEGORY	A	B	C	D
LNAV MDA	1860-1	450 (500-1)	1860-1¼ 450 (500-1¼)	NA
CIRCLING	1900-1	490 (500-1)	1900-1½ 490 (500-1½)	NA

MIRL Rwy 17-35 (L)
REIL Rwys 17 and 35 (L)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 35

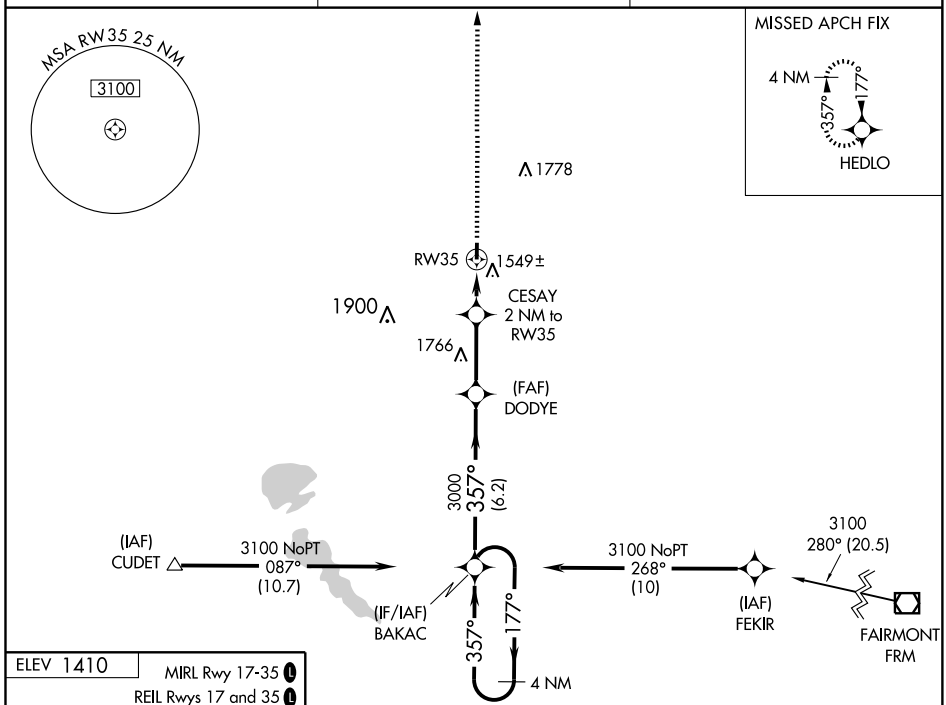
WINDOM MUNI (MWM)

APP CRS	Rwy Idg	3599
357°	TDZE	1410
	Apt Elev	1410

⚠ NA — GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Procedure not authorized at night.

MISSED APPROACH: Climb to 3000 direct HEDLO WP and hold.

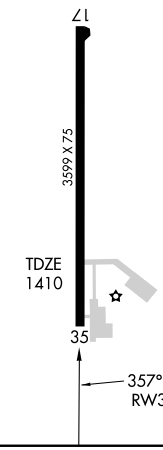
AWOS-3	MINNEAPOLIS CENTER	CTAF
118.525	127.1 290.2	122.9 (L)



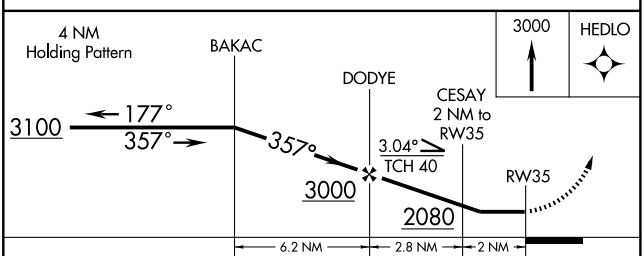
ELEV 1410

MIRL Rwy 17-35 (L)

REIL Rwys 17 and 35 (L)



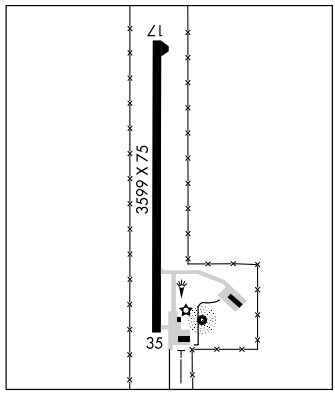
Procedure NA for arrival on FRM VOR/DME airway radials 217 CW 336 and arrivals at CUDET via V250 southwestbound.



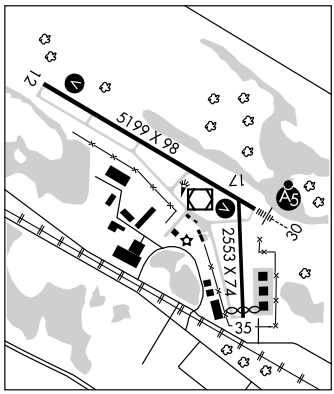
CATEGORY	A	B	C	D
LNAV MDA	1800-1 390 (400-1)			NA
CIRCLING	1900-1 490 (500-1)		1900-1½ 490 (500-1½)	NA

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WINDOM MUNI (MWM) 3 N UTC−6(−5DT) N43°54.80′ W95°06.56′ OMAHA
1410 B **FUEL** 100LL NOTAM FILE MWM L–12I
RWY 17–35: H3599X75 (ASPH) S–15, D–20 MIRL IAP
RWY 17: REIL. **RWY 35:** REIL.
AIRPORT REMARKS: Unattended. Fuel avbl 24 hrs with credit card. Ultralights on and invof arpt. Birds on and invof arpt. Rwy 17–35 bumpy ride, multiple cracks. ACTIVATE MIRL Rwy 17–35 and REIL Rwy 17 and Rwy 35—CTAF.
WEATHER DATA SOURCES: AWOS–3 118.525 (507) 831–1833.
COMMUNICATIONS: CTAF 122.9
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 127.1.
RADIO AIDS TO NAVIGATION: NOTAM FILE RWF.
REDWOOD FALLS (H) VORW/DME 113.3 RWF Chan 80 N44°28.04′ W95°07.69′ 172° 33.2 NM to fld. 1061/7E. **HIWAS.**
NDB (MHW) 203 MWM N43°54.56′ W95°06.55′ at fld. NOTAM FILE MWM.



WINONA MUNI–MAX CONRAD FLD (ONA) 3 NW UTC−6(−5DT) N44°04.63′ W91°42.50′ GREEN BAY
656 B S4 **FUEL** 100LL, JET A NOTAM FILE ONA H–2J, L–28F
RWY 12–30: H5199X98 (ASPH) S–30, D–55 MIRL IAP
RWY 12: REIL. VASI(V4L)—GA 3.0° TCH 42′. Trees.
RWY 30: MALSR. VASI(V4L)—GA 3.0° TCH 42′. Trees. Rgt tfc.
RWY 17–35: H2553X74 (ASPH)
RWY 17: Trees. **RWY 35:** Thld dsplcd 151′. Trees. Rgt tfc.
AIRPORT REMARKS: Attended 1400–2300Z‡. Deer and waterfowl on and invof arpt. Rwy 17–35 grass growing through cracks, pavement bleached. MIRL Rwy 12–30 preset on low ints, to increase ints and ACTIVATE VASI Rwy 12 and Rwy 30, REIL Rwy 12 and MALSR Rwy 30—CTAF.
WEATHER DATA SOURCES: AWOS–3 111.4 ONA (507) 453–2991.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 122.15 (PRINCETON RADIO)
Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 128.6
RADIO AIDS TO NAVIGATION: NOTAM FILE ONA.
(T) VORW/DME 111.4 ONA Chan 51 N44°04.57′ W91°42.34′ at fld. 654/1E. **AWOS–3.** Unmonitored.
VOR/DME unusable:
107°–117° byd 17 NM
118°–316°
317°–327° byd 17 NM
328°–106°
LOC/DME 109.35 I–ONA Chan 30(Y) Rwy 30.



WINSTED MUNI (1ØD) 1 SW UTC−6(−5DT) N44°57.00′ W94°04.02′ TWIN CITIES
1030 B **FUEL** 100LL NOTAM FILE PNM
RWY 09–27: 3248X200 (TURF) LIRL
RWY 09: Road. **RWY 27:** Trees.
AIRPORT REMARKS: Attended 1400–0000Z‡. Fuel avbl 24 hrs with credit card. Ultralight activity on and invof arpt. Be alert of ultralight tfc in lower pattern. Rwy 09–27 marked with yellow cones.
COMMUNICATIONS: CTAF 122.9

WIPLINE SPB (See INVER GROVE HEIGHTS)

WONDD N43°37.04′ W95°27.84′ NOTAM FILE OTG. OMAHA
NDB (LOM) 277 OT 287° 5.5 NM to Worthington Muni. OTS indef.

LOC/DME I-ONA	APP CRS	Rwy Idg 5199
109.35	298°	TDZE 656
Chan 30 (Y)		Apt Elev 656

LOC RWY 30

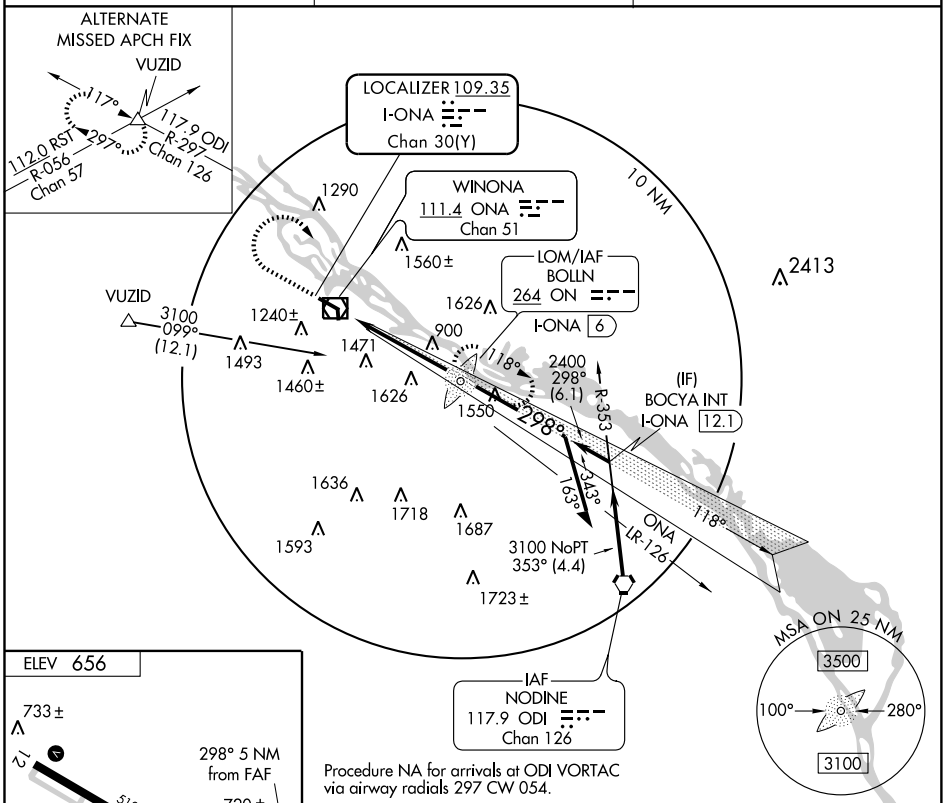
WINONA MUNI-MAX CONRAD FIELD (ONA)

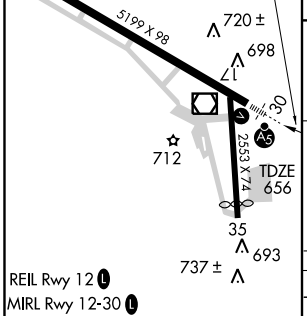
ADF required. When local altimeter setting not received, use La Crosse altimeter setting and increase all MDA 60 feet and increase S-30 Cats C and D visibility ¼ mile. VDP NA when using La Crosse altimeter setting.

MALSR

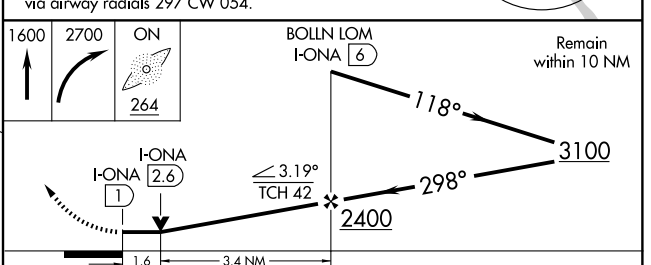
MISSED APPROACH: Climb to 1600 then climbing right turn to 2700 direct BOLLN LOM/I-ONA 6 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
111.4	128.6 363.0	122.8 (CTAF) L





Procedure NA for arrivals at ODI VORTAC via airway radials 297 CW 054.



FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

CATEGORY	A	B	C	D
S-30	1200-½ 544 (600-½)		1200-1 544 (600-1)	1200-1¼ 544 (600-1¼)
CIRCLING	1600-1¼ 944 (1000-1¼)	1620-1½ 964 (1000-1½)	1640-3 984 (1000-3)	1840-3 1184 (1200-3)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

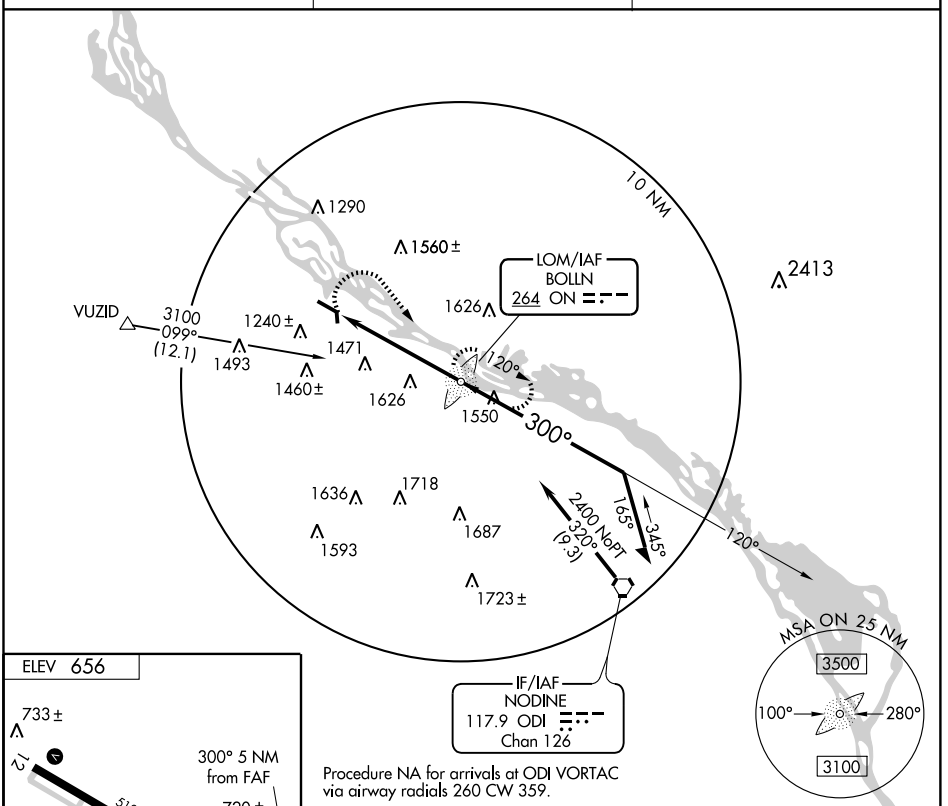
LOM ON	APP CRS	Rwy Idg	5199
264	300°	TDZE	656
		Apt Elev	656

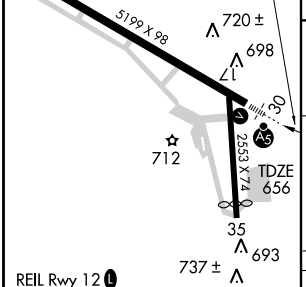
NDB RWY 30

WINONA MUNI-MAX CONRAD FIELD (ONA)

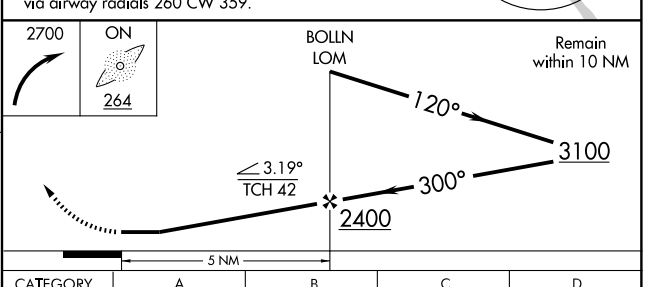
▼ NA: Inoperative table does not apply to Cat A. When local altimeter setting not received, use La Crosse altimeter setting and increase all MDA 60 feet.	MALSR	MISSED APPROACH: Climbing right turn to 2700 direct BOLLN LOM and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
111.4	128.6 363.0	122.8 (CTAF) L





FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D
S-30	1980-1¼ 1324 (1400-1¼)		1980-2½ 1324 (1400-2½)	1980-2¾ 1324 (1400-2¾)
CIRCLING	1980-1¼ 1324 (1400-1¼)	1980-1½ 1324 (1400-1½)	1980-3 1324 (1400-3)	

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

RNAV (GPS) RWY 30

WINONA MUNI-MAX CONRAD FIELD (ONA)

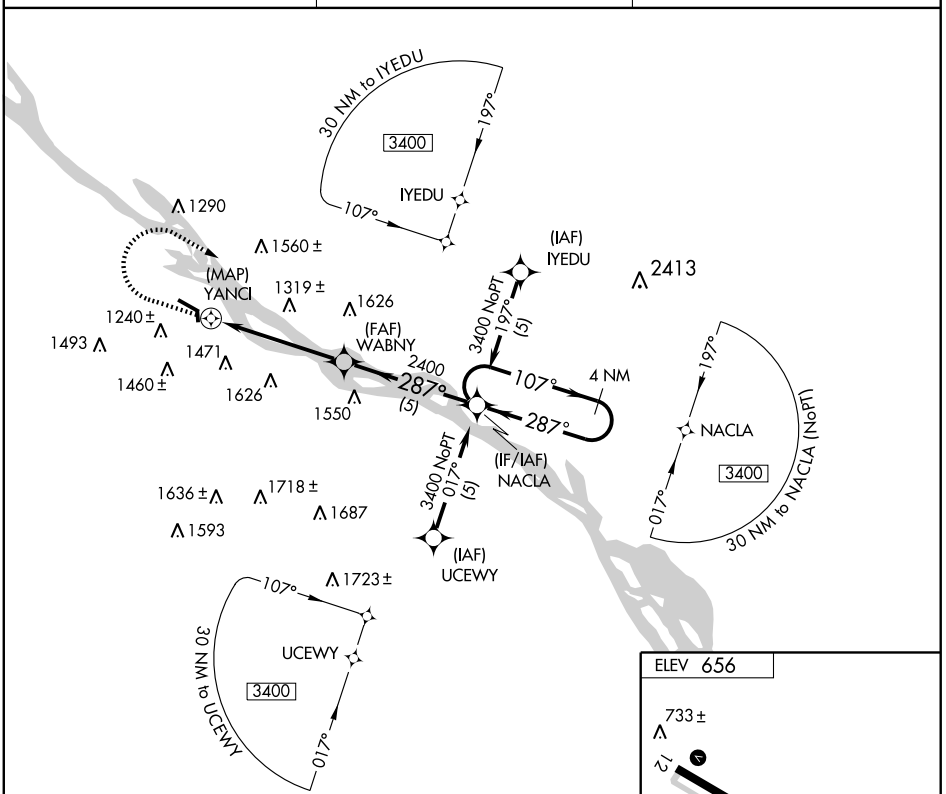
APP CRS	Rwy Idg	5199
287°	TDZE	656
	Apt Elev	656

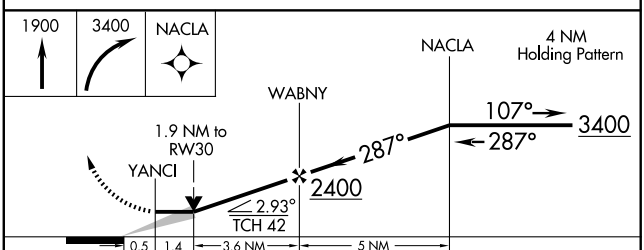
T A NA GPS or RNP- 0.3 required. DME/DME RNP- 0.3 NA.

MALSR

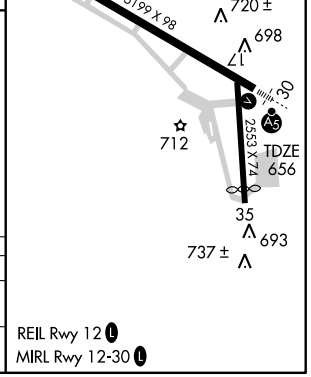
MISSED APPROACH: Climb to 1900, then climbing right turn to 3400 direct NACLA WP and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
111.4	128.6 363.0	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1460-½ 804 (900-½)	1460-¾ 804 (900-¾)	1460-1¾ 804 (900-1¾)	1460-2 804 (900-2)
CIRCLING	1600-1¼ 944 (1000-1¼)	1620-1½ 964 (1000-1½)	1620-3 964 (1000-3)	1840-3 1184 (1200-3)



REIL Rwy 12 L
MIRL Rwy 12-30 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME ONA 111.4 Chan 51	APP CRS 292°	Rwy Idg 5199 TDZE 656 Apt Elev 656

VOR RWY 30

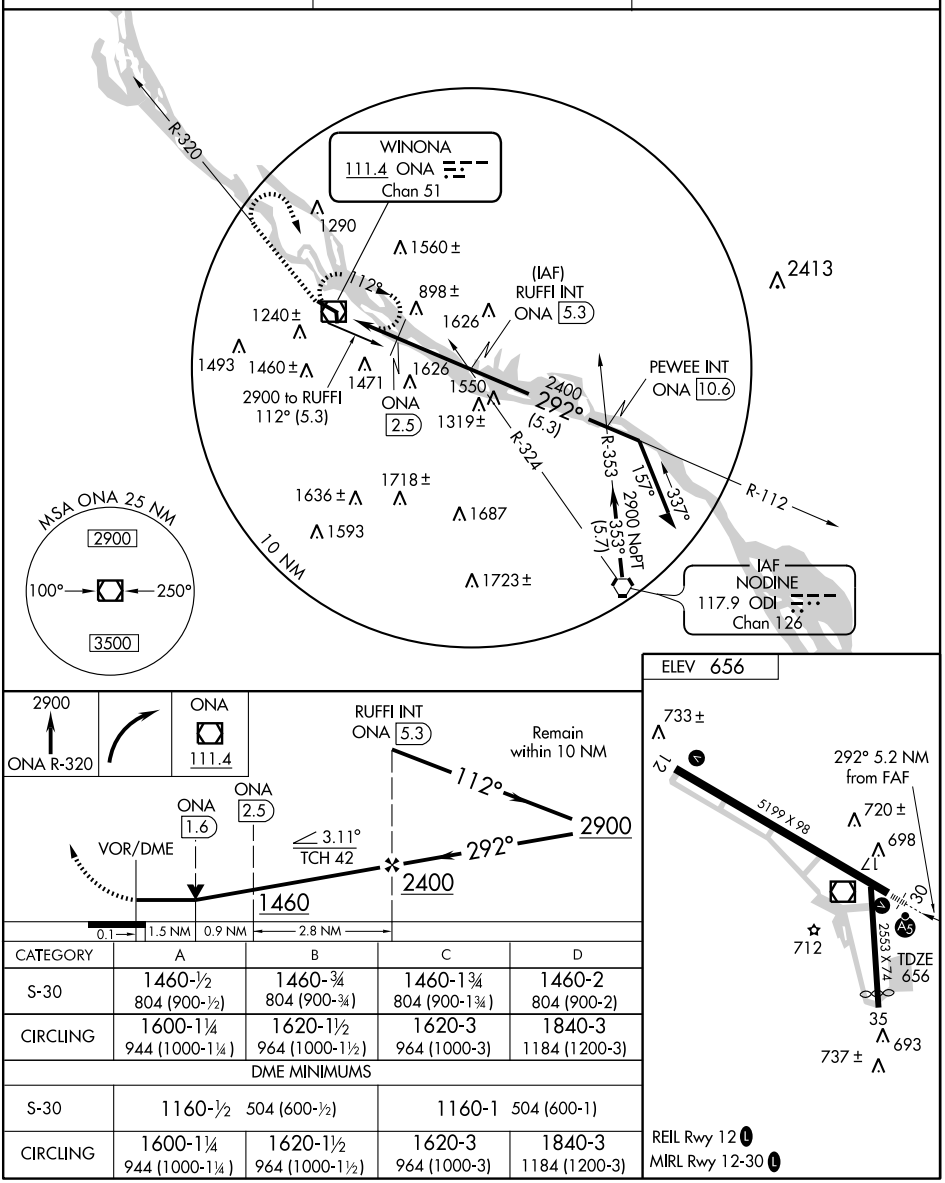
WINONA MUNI-MAX CONRAD FIELD (ONA)

T
NA

MALSR

MISSED APPROACH: Climb to 2900 via ONA R-320 then right turn direct ONA VOR/DME and hold.

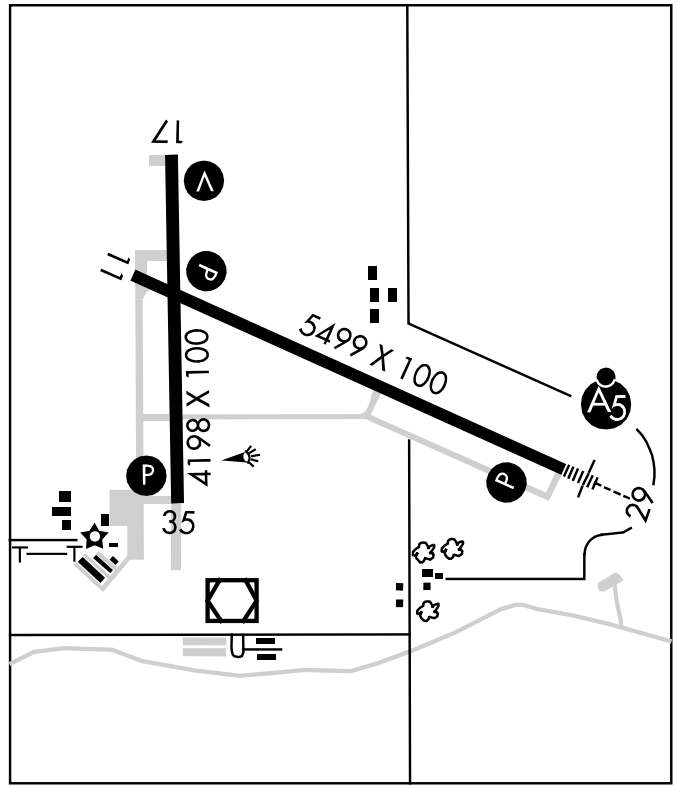
AWOS-3	MINNEAPOLIS CENTER	UNICOM
111.4	128.6 363.0	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-30	1460-½ 804 (900-½)	1460-¾ 804 (900-¾)	1460-1¾ 804 (900-1¾)	1460-2 804 (900-2)
CIRCLING	1600-1¼ 944 (1000-1¼)	1620-1½ 964 (1000-1½)	1620-3 964 (1000-3)	1840-3 1184 (1200-3)
DME MINIMUMS				
S-30	1160-½ 504 (600-½)		1160-1 504 (600-1)	
CIRCLING	1600-1¼ 944 (1000-1¼)	1620-1½ 964 (1000-1½)	1620-3 964 (1000-3)	1840-3 1184 (1200-3)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

WORTHINGTON MUNI (OTG) 2 N UTC−6(−5DT) N43°39.30′ W95°34.75′ **OMAHA**
1574 B S2 **FUEL** 100LL, JET A NOTAM FILE OTG **H–5C, L–12I**
RWY 11–29: H5499X100 (ASPH–GRVD) S–44, D–60 HIRL **IAP**
RWY 11: REIL. PAPI(P4L)—GA 3.0° TCH 42′. Trees.
RWY 29: MALSR. PAPI(P4L)—GA 3.0° TCH 43′.
RWY 17–35: H4198X100 (ASPH–GRVD) S–44, D–60 MIRL
RWY 17: REIL. VASI(V4L)—GA 3.0° TCH 26′.
RWY 35: REIL. PAPI(P4L)—GA 3.0° TCH 30′.
AIRPORT REMARKS: Attended Mon–Fri 1400–2300Z‡. For svc call 537–376–9293, after hrs call 507–360–9959. Self service fuel with credit card. Rwy 17–35 alligator cracking. HIRL Rwy 11–29 preset on low ints, to increase ints and ACTIVATE MIRL Rwy 17–35, REIL Rwy 11, Rwy 17, and Rwy 35, PAPI Rwy 11, Rwy 29, and VASI Rwy 17 and PAPI Rwy 35, MALSR Rwy 29—CTAF.
WEATHER DATA SOURCES: AWOS–3 110.6 OTG (507) 376–9441.
COMMUNICATIONS: CTAF/UNICOM 122.8
RCO 123.6R 122.1R 110.6T (PRINCETON RADIO)
MINNEAPOLIS CENTER APP/DEP CON 132.05
AIRSPACE: CLASS E svc Mon–Fri 1200–1700Z‡ and 2100–0100Z‡, Sat 1200–1700Z‡, Sun 2100–0100Z‡ other times Class G.
RADIO AIDS TO NAVIGATION: NOTAM FILE OTG.
(L) VOR/DME 110.6 OTG Chan 43 N43°38.82′ W95°34.92′ at fld. 1571/8E. **AWOS–3**.
VOR unusable:
031°–049°byd 25 NM 269°–008° byd 15 NM blo 7000′.
096°–135° byd 15 NM blo 8000′
DME portion unusable:
120°–220° byd 30 NM blo 3,500′ 220°–305° byd 30 NM blo 4,000′.
WONDD NDB (LOM) 277 OT N43°37.04′ W95°27.84′ 287° 5.5 NM to fld. OTS indef.
ILS 111.7 I–OTG Rwy 29. LOM WONDD NDB. GS unusable for coupled approaches blo 1770′ MSL.



ILS RWY 29
WORTHINGTON MUNI (OTG)

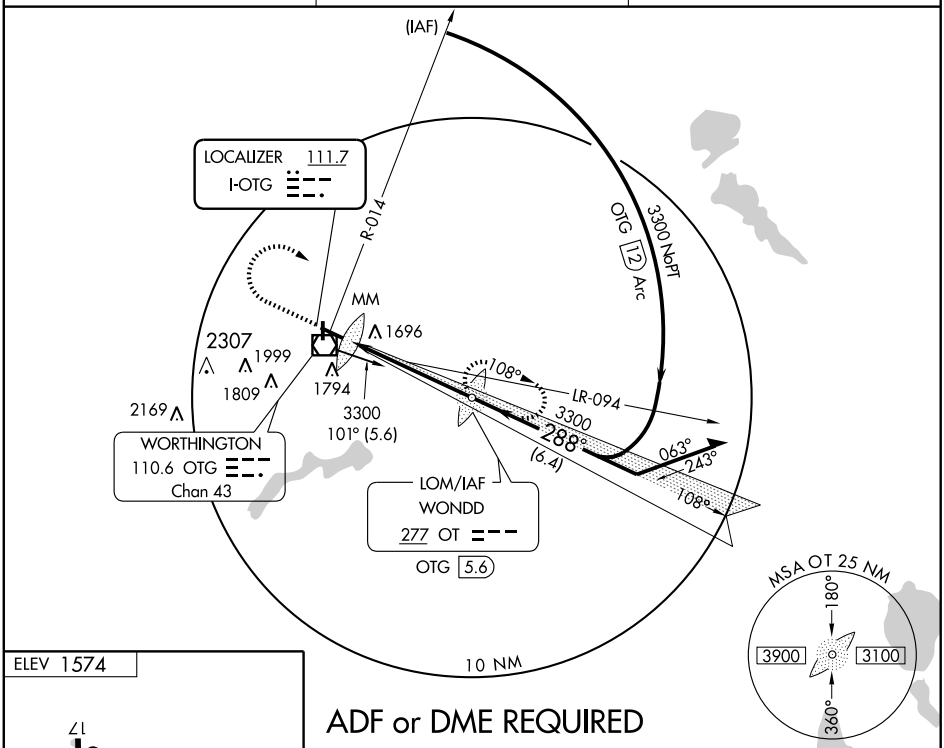
LOC I-OTG	APP CRS	Rwy Idg	5499
111.7	288°	TDZE	1570
		Apt Elev	1574

T
NA

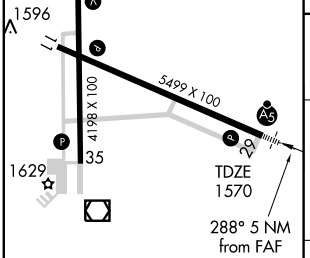
MALSR

MISSED APPROACH: Climb to 2500 then climbing right turn to 3300 direct WONDD LOM/OTG 5.6 DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.6	132.05 317.4	122.8 (CTAF) L

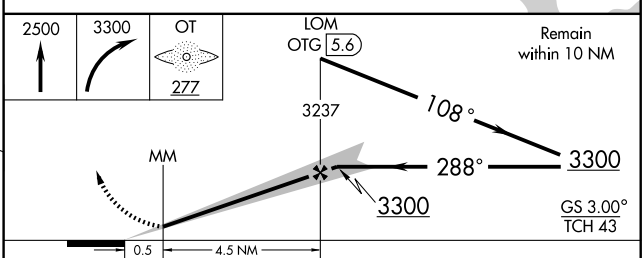


ADF or DME REQUIRED



MIRL Rwy 17-35 L
HIRL Rwy 11-29 L
REIL Rwys 11, 17, and 35 L

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D
S-ILS 29	1770-½ 200 (200-½)			
S-LOC 29	1920-½ 350 (400-½)			1920-¾ 350 (400-¾)
CIRCLING	2100-1 526 (600-1)		2100-1½ 526 (600-1½)	2140-2 566 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

LOM OT	APP CRS	Rwy Idg	5499
277	288°	TDZE	1570
		Apt Elev	1574

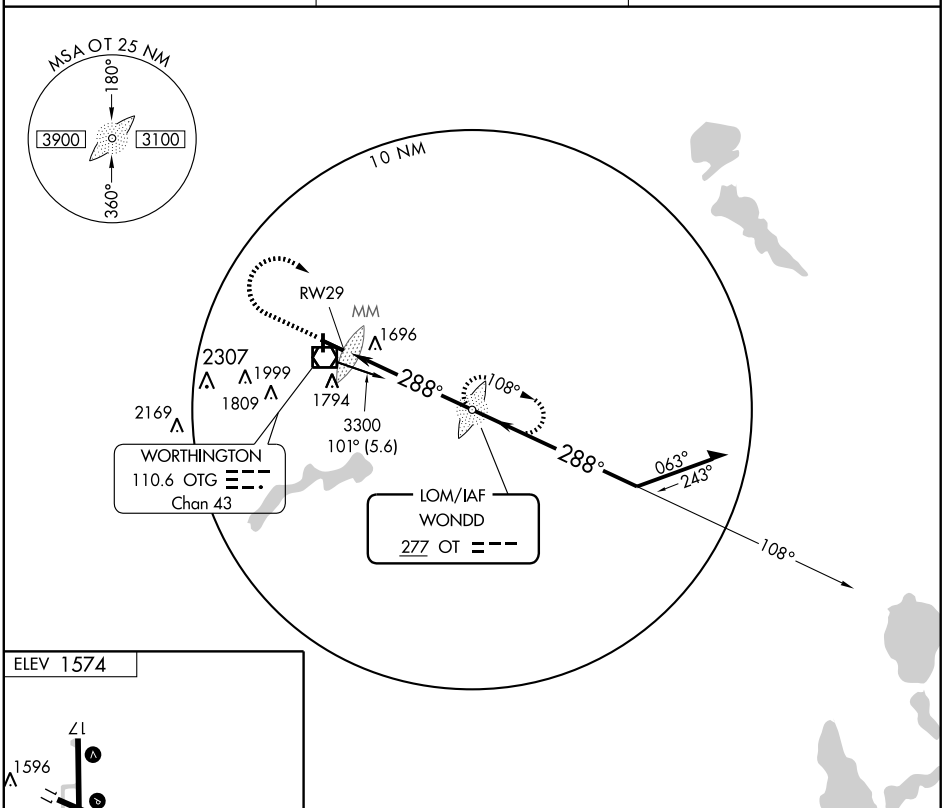
NDB or GPS RWY 29
WORTHINGTON MUNI (OTG)

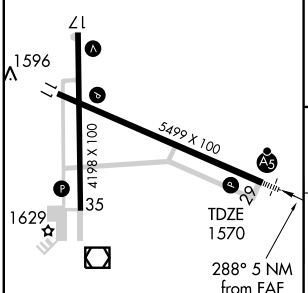
NA

MALSR

MISSED APPROACH: Climb to 2500 then climbing right turn to 3300 direct OT LOM and hold.

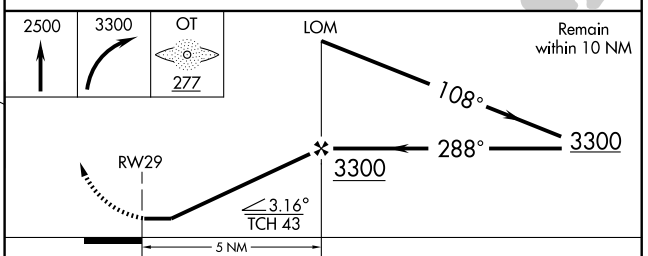
AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.6	132.05 317.4	122.8 (CTAF) L





MIRL Rwy 17-35 L
HIRL Rwy 11-29 L
REIL Rwys 11, 17, and 35 L

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D
S-29	2100-¾ 530 (600-¾)		2100-1 530 (600-1)	2100-1½ 530 (600-1½)
CIRCLING	2100-1 526 (600-1)		2100-1½ 526 (600-1½)	2140-2 566 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

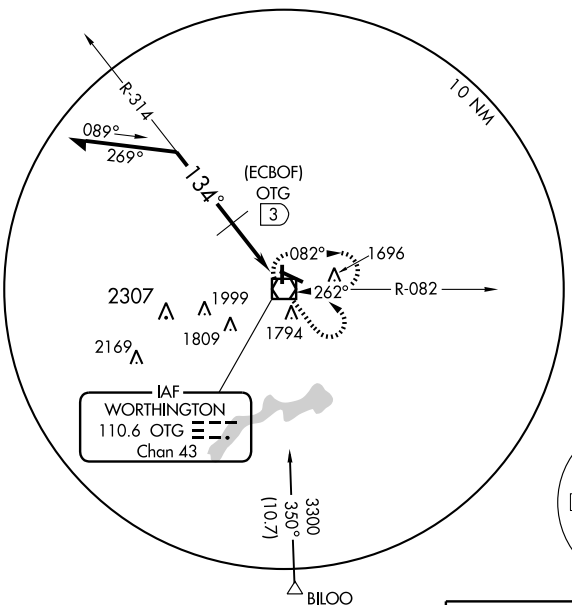
VOR/DME OTG	APP CRS	Rwy Idg	5499
110.6	134°	TDZE	1574
Chan 43		Apt Elev	1574

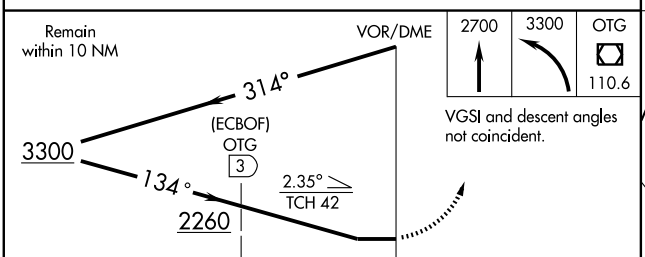
VOR or GPS RWY 11

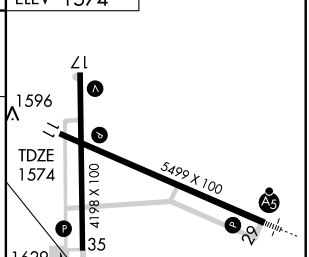
WORTHINGTON MUNI (OTG)

MISSED APPROACH: Climb to 2700 then climbing left turn to 3300 direct to OTG VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.6	132.05 317.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-11	2260-1	686 (700-1)	2260-2 686 (700-2)	2260-2¼ 686 (700-2¼)
CIRCLING	2260-1	686 (700-1)	2260-2 686 (700-2)	2260-2¼ 686 (700-2¼)
DME MINIMUMS				
S-11	2020-1	446 (500-1)	2020-1¼ 446 (500-1¼)	2020-1½ 446 (500-1½)
CIRCLING	2100-1	526 (600-1)	2100-1½ 526 (600-1½)	2140-2 566 (600-2)

MIRL Rwy 17-35 L
HIRL Rwy 11-29 L
REIL Rwys 11, 17, and 35 L

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

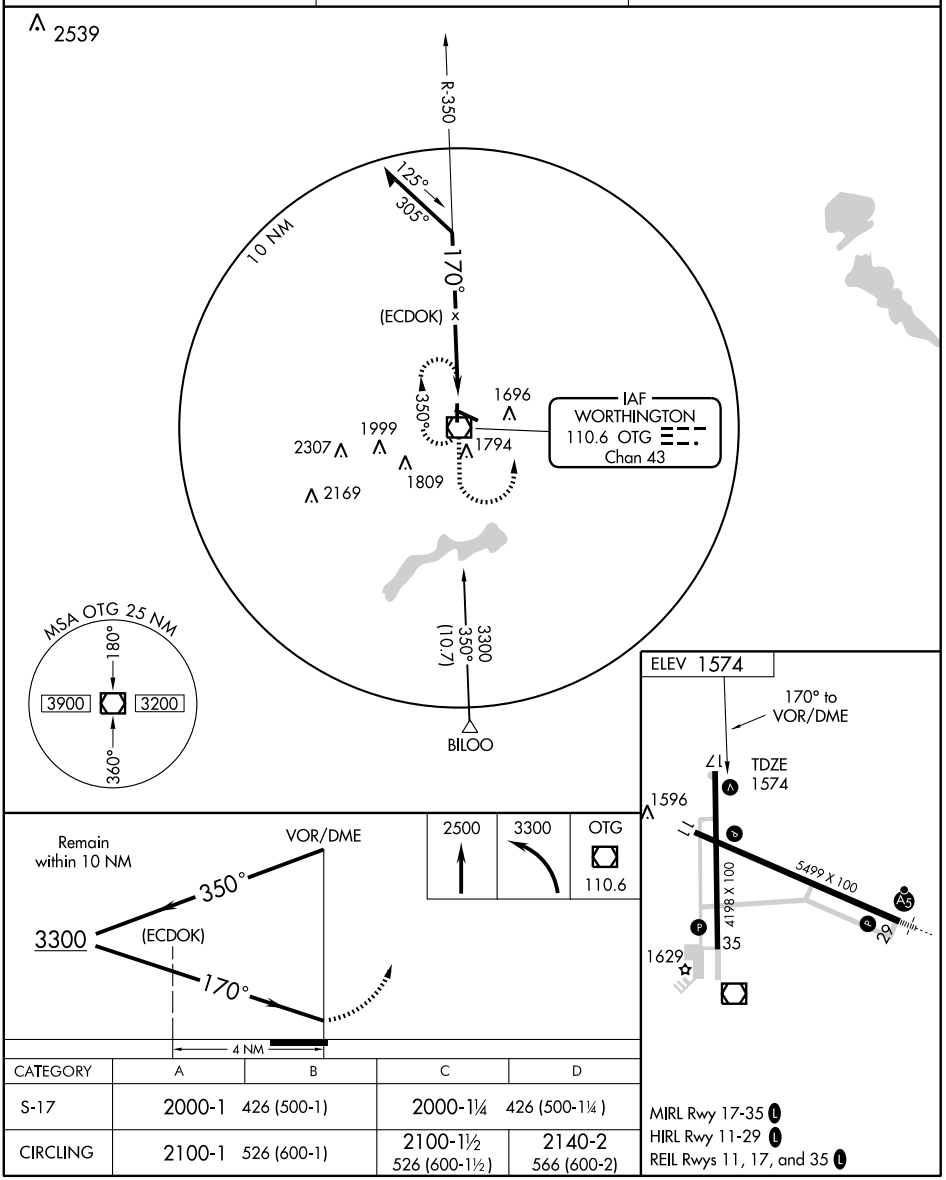
VOR/DME OTG	APP CRS	Rwy Idg	4198
110.6	170°	TDZE	1574
Chan 43		Apt Elev	1574

VOR or GPS RWY 17

WORTHINGTON MUNI (OTG)

MISSED APPROACH: Climb to 2500 then climbing left turn to 3300 direct OTG VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.6	132.05 317.4	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-17	2000-1	426 (500-1)	2000-1¼	426 (500-1¼)
CIRCLING	2100-1	526 (600-1)	2100-1½ 526 (600-1½)	2140-2 566 (600-2)

MIRL Rwy 17-35 L
HIRL Rwy 11-29 L
REIL Rwys 11, 17, and 35 L

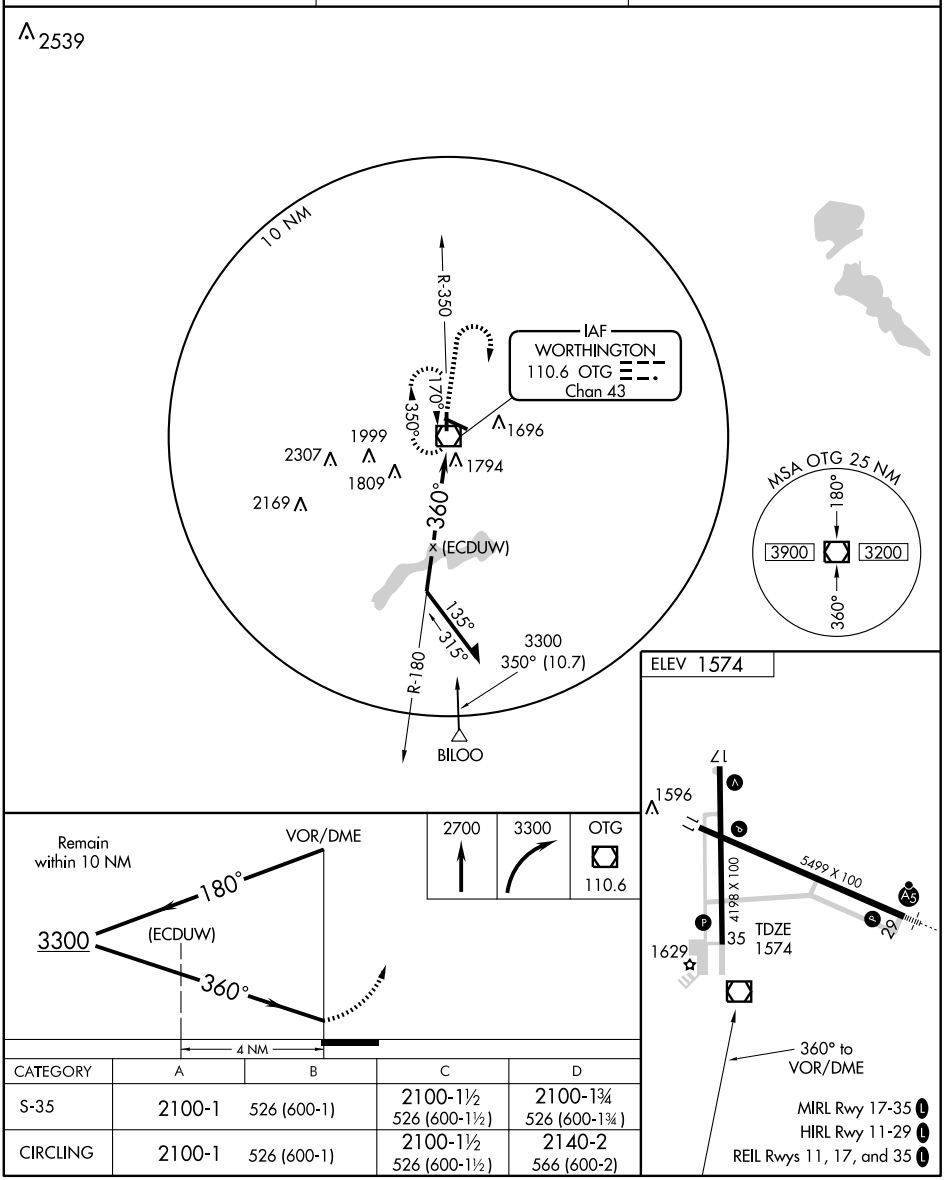
NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010

VOR/DME OTG	APP CRS	Rwy Idg	4198
110.6	360°	TDZE	1574
Chan 43		Apt Elev	1574

VOR or GPS RWY 35
WORTHINGTON MUNI (OTG)

MISSED APPROACH: Climb to 2700 then climbing right turn to 3300 direct OTG VOR/DME and hold.

AWOS-3	MINNEAPOLIS CENTER	UNICOM
110.6	132.05 317.4	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-35	2100-1	526 (600-1)	2100-1½ 526 (600-1½)	2100-1¾ 526 (600-1¾)
CIRCLING	2100-1	526 (600-1)	2100-1½ 526 (600-1½)	2140-2 566 (600-2)

NC-1, 21 OCT 2010 to 18 NOV 2010
NC-1, 21 OCT 2010 to 18 NOV 2010